

The Mining Journal

RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 283.—Vol. XI.]

LONDON: SATURDAY, JANUARY 23, 1841.

[PRICE 6D.]

VALUABLE MINE, ENGINES, AND MACHINERY, FOR SALE.

TO BE SOLD BY AUCTION, on Friday, the 12th of February next, at Three o'clock in the afternoon, at the Marazion Hotel, in the town of Marazion, all that **TIN and COPPER MINE** called the **GWALLON MINE**, situated in the parish of St. Hilary, in Cornwall; on which an **ENGINE** of 30-inch cylinder has been erected, together with the following **MATERIALS**:—one 17-inch whim and stamp engine, 12 ft. high; three cast-iron, shears, and two ropes, twelve and six inches; two 20 and one 2 ft. stamping mills, the latter eight beds; four horse whims, tackle, ropes, and chain; eight plunger poles, from six to fourteen inches diameter, with cases, stuffing-boxes, &c., to match, each fourteen inches; 1½, 12, and 4-inch H-pieces, with top, doors, seats, &c.;

Twenty 9-foot 14-inch pumps } with working pieces, clack
Eighteen 13 " } seats, and windrobs, to
Sixteen 12 " } match;
Five 10 " }
Four 6 " }

seventy fathoms of 7, 9, and 10-inch rods; plates and bolts; three smiths' bellows, anvils, vice, and a large quantity of screw; 3 smiths' and miners' tools; together with tin frames, buddies, shreds, iron, timber, and other useful articles, account-house furniture, &c.—This mine is at present suspended, owing to the embarrassment of the late adventurers, but it has produced large quantities of tin, the prospects are highly flattering, and the recent discoveries in the Marazion Mines, which adjoin this, render it a most promising speculation. It is well known that there is a great scarcity of tin, and the recent exertions made by the Miners' Smelting Company, will insure a fair price for the tin produced by this mine.

To inspect the mine, and for further particulars, application may be made to Captain William Richards, Rosepath, Marazion, or to Messrs. Grylls and Hill, solicitors, Helston.—Dated Helston, Jan. 20.

Near to Northampton.—The Kingthorpe Lodge Estate, of 14 acres of superior land, possessing the advantages of lime and building stone, sand, mineral water, and a certain prospect of coal, to an incalculable extent, producing a considerable rental, which will speedily be quadrupled.

MR. GEORGE ROBINS has received positive instructions to submit for peremptory sale, at the Auction Mart, London, on Thursday, February 15, at Twelve, the important and singularly valuable freehold property, known as the Kingthorpe Lodge Estate, situated about one mile from the town of Northampton; and within five miles of the railway station at Blisworth. The extraordinary advantages to be enumerated appertaining to this estate are such as to induce Mr. Robins to enlist the attention of the speculating capitalist to the following statement:—There is a capital brick built farm residence, most delightfully situated, commanding extensive and picturesque views, all suitable buildings, with 104 acres of rich pasture and arable land, in a high state of cultivation, possessing considerable frontage to the high road from Northampton to Market Harborough, and offering innumerable sites for the erection of villa residences, so much needed by the opulent inhabitants of Northampton, and for the success of this speculation the mineral water lately discovered would appear in the shape of a "godsend." The lime, building, and paving-stone **QUARRIES** are of great extent, now in full work, with stone yards, shed, and steam-engine, working seven saws, erected by the tenant. From these quarries the stone has been supplied for St. Andrew's Church, now erecting in the town; it is also used for ornamental chimney pieces. The land and quarries are let to Mr. William D-unkey, a responsible tenant, at an annual rent of £400. Also may be added the valuable **BEDS of SAND**, used in the manufacture of glass, and which has been found to produce a glass superior in quality and brilliancy to the celebrated "Lynn Sand." There has also been discovered a fine saline water, which has been analysed, and is highly recommended in cases of chronic diseases, and which it is presumed would materially enhance the value of a building operation; and, lastly, the important advantages to be derived from the **MINERALS** of the estate, which are incontestably proved to abound under a greater portion of the land. The Northampton Union Coal and Mining Company have taken a lease of the minerals under only fifty acres of the estate, the remaining portion is open to the speculator to embark his capital with every certainty of success, and has expended a sum, approaching £20,000 in boring and sinking shafts and preparing works, by erecting two powerful steam-engines, with dwelling-houses, workshop, and stables. It is calculated, if when their operations shall have progressed, at least 150 tons of coal per diem may with ease be raised; and as a heavy royalty is payable by the company, from this source alone a princely income may be contemplated with the greatest certainty.

The estate may be viewed by applying to Mr. George Pell, of Buttock's Booth, and full particulars, with a plan, had of him; also of Mr. J. H. Pell, of Northampton; or Messrs. H. H. and J. H. Pell, solicitors, and at the office of the *Herald*, Birmingham; or Messrs. Vincent and Sherwood, solicitors, King's Bench walk, Temple; at the Auction Mart; and at Mr. George Robins's office, Covent garden.

FREEMOULD LAND, WOOD, AND MINES.

TO BE SOLD, BY PRIVATE CONTRACT, all that MES- SAGE, BUILDINGS, and ARABLE, MEADOW, and PASTURE LAND, containing 147A. 0n. 37r., in the occupation of Mr. John King; also a tract of WOOD LAND (called Haunch Wood), containing 47A. 2a. 37r., together with the MINES of COAL and IRONSTONE and other MINERALS, extending under the greater part of the land, and a wood. The situation is within a short distance of the Coventry Canal, and the Mines consist of a valuable seam of Coal and Ironstone, now so extensively worked in the county of Warwick. The whole lies within a moderate depth, and may be drained at a moderate expense. The tenant will show the property. Plans of the estate may be seen at the office of Mr. Radford, Atherstone; at Mr. Harris's, Ward end, near Birmingham; at Mr. C. Couchman's, 31, Waterloo street, ditto; and terms may be known, on application to Mr. Wood House, mineral agent, Overseal, near Ashby de la Zouch.

TO BE SOLD, BY PRIVATE CONTRACT, that extensive coal field, known as the **HAZELRIGG COAL MINES**, together with the long established, and valuable current-going colliery, called **PAWTON COLLIERY**, situated about three miles north of Newcastle-upon-Tyne, with all the fixed and movable stock thereon. The coal, which is the High Main, or Wal's End seam, is of excellent quality for domestic purposes, and has been well known in the London and coast markets for the last twenty-six years as "Newmarket's Wal's End." A new winning was completed by two men and two years ago, and a pumping engine erected thereon, considerably more than competent to the fullest requirements of the colliery, and no outlay will be needed in the winning of new portions of coal to this colliery for a long period of years. The great extent of the Hazelrigg coal field, comprising about 400 acres, affords the opportunity of establishing other valuable collieries. For further particulars, application may be made to Mr. James Easton, the colliery viewer; to Mr. Thomas Forster, Hazelrigg colliery; to John Wilkinson, Esq., solicitor, Hull; to Messrs. Bell, Brindley, and Bell, solicitors, Bow Church-yard, London; or to Messrs. Carr and Jobling, solicitors, Newcastle-upon-Tyne. Newcastle, November, 1840.

COAL AND IRONSTONE ON THE COAST OF EAST LOTHIAN, SCOTLAND.

TO BE LET, FOR Nineteen Years, with immediate entry, the COAL and IRONSTONE of the Barony of SETON, situated in the parish of Tranent, ten miles east of Edinburgh, and five from Haddington. Two seams, of about thirty three inches each, have been partially worked, and found to lie in regular manner. Besides these, there are other seams of greater thickness. The quality is first rate. The situation commands an extensive country sale; and if the coal is worked to such an extent beyond the land sale as to make it an object, the proprietor would be ready to imrove the harbour of Port Seton upon the property.—The Ironstone is found in balls in the roof of the coal; it contains 28 per cent. of metal, and is readily purchased by the Carron Company and others. For further particulars, application may be made to Messrs. Tod and Hill, W.S., George street, Edinburgh; or Mr. James Burnet, Aberlady, by Haddington. Edinburgh, Jan. 11.

CROWN POINT BRIDGE AND ROADS.—TO IRON

MASTERS, MASONS, AND GENERAL CONTRACTORS.—The commissioners acting under and by virtue of an Act of Parliament, passed in the third year of the reign of her present Majesty, entitled "An Act for making and maintaining a New Bridge over the River Aire at Leeds, and at near a place called Crown Point, with suitable Approaches thereon; and for making certain Drains or Water courses under the Road leading to such Bridge, and through the adjoining Lands, to communicate with the River Aire below the Leeds Locks," will MEET at the Court House, in Leeds, on Wednesday, the 14th day of February next, to RECEIVE TENDERS or PROPOSALS for the rebuilding, erecting, and completing of a BRIDGE, of one arch, over the RIVER AIRE at Leeds.—The arch will be of iron, 12½ feet span—the abutments will be of stone. Plans and specifications may be seen, and further information may be had, from and after Friday, the 15th day of January instant, on application at the office of Messrs. George Leather and Son, civil engineers, in Leeds.

JOHN ATKINSON, Clerk to the said Commissioners.

Leeds, Jan. 4.

THAMES TUNNEL.—Open to the public every day (except

Fridays) from Nine in the morning until Six in the evening. Admission One Shilling. The entrance is on the Surrey side of the river, close to Rotherhithe Church. The Tunnel is eleven hundred and forty feet in length, brilliantly lighted with gas, and visitors are now allowed to pass under the entire breadth of the river, and to approach the Abutment, which is advanced to within limits of the wharf at Wapping. By order, J. CHARLIER, Clerk to the Company. Wapping, January, 1841. N.B.—Conveyances to Rotherhithe, by omnibus, from Fenchurch, Charing Cross, Fleet street, and Cannon-street, and by steam boats, from Chelsea, Vauxhall, Lambeth, Hammersmith, Greenwich, the Old Shades Pier, and London Bridge, to the Tunnel Pier at Wapping.

IRON MINES IN GREECE.—A Gentleman, lately returned from Greece, is willing to afford information to any persons wishing to EM- BARK IN FOREIGN MINING SPECULATION, and not objecting to the kingdom of Greece. He conceives there are peculiar advantages in the situation of Greece, and that the present time is favourable to making preliminary enquiries on the spot. The supposed mines are iron (and probably copper) and judged to be very rich; are not far from the sea, and in a mountainous district. A secure port is distant about twenty miles from the place, and anchorage and landing may be easily effected at the distance of six miles, without an intervening hill, and smelting wood may be procured on the spot. An experienced and skilful person must, however, be sent to the spot. The post from London to Athens occupies seventeen days; the most convenient route is by steam from London to Malta, and thence by French steamer to Athens. The proprietors of the district speak English, French, and German.—Address, "A. B. C.," to the care of Messrs. Bywater and Co., Lower Grosvenor-street, London.

TO COLLIERY BAILIFFS AND OTHERS.—WANTED, a competent person, from thirty to thirty-five years of age, to TAKE CHARGE of the UNDERGROUND DEPARTMENT of a COLLIERY; he must be thoroughly conversant with darning and ventilation, on the most approved modes; none but persons of the strictest integrity and industry need apply. Application to be made to Mr. Woodhouse, mineral agent, Overseal, near Ashby-de-la-Zouch.

TO COAL PROPRIETORS, LAND SURVEYORS, AND OTHERS.—WANTED, by a Young Man, who has been for the last seven years employed in a land and mine surveyor's office, a situation, either as a LAND or COAL AGENT, or would have no objection to engage with a mining surveyor as clerk. Testimonials as to character and ability will be given, by applying (post-paid) to "X. Y.," Post-office, Liverpool.

NOTICE.—R. B. WATSON and CO., of LEEDS, beg to ac- quaint their friends and the public, that they have OPENED a BRANCH HOUSE in HULL, for the SALE and PURCHASE of SHARES of all descriptions, under the firm of R. B. WATSON and HELL.—R. B. W. has known Hull for thirty years, and Leeds for twenty-five—having lived in the former place twenty years, and in the latter ten.

SULPHATE OF COPPER.—MARGARY'S PATENT.—This patent process for PRESERVING TIMBER, CANVASS, CORDAGE, &c., FROM DRY-ROT, DECAY, AND MILDEW, is most strongly recommended to RAILWAY CONTRACTORS, Ship-owners, Agriculturists, and Hop Planters, as the most effective, as well as the cheapest, process hitherto discovered for that purpose. Repeated trials with prepared and unprepared wood and canvass, in the furnace pit, at Woolwich, and other places, most favourably to decay, have proved as incontrovertibly the efficacy of this process, and the fact of sulphate of copper, the material used, being only 3d. a pound wholesale, not one eighteenth the price of corrosive sublimate, renders it so very economical that it is now adopted by the Corps of Ordnance, and extensively used on the Southampton, Gosport, and other railways. Licenses for tanks will be granted by the patentee at the rate of 2d. 4d. per cubic foot of the internal measure, on application to his agent, Mr. Lee, sail-cloth factor, 57, Leadenhall-street, of whom may be had prepared sail-cloth, prepared d. rick cloths, tarpaulins, socks, &c., &c.

ECONOMY IN FUEL, WITHOUT SMOKE, effected on Chemical Principles, by the PATENT IMPROVED FURNACE OF CHARLES WYER WILLIAMS, Esq., BROCKLEHURST, DIBBICK MEN'S, being authorized by the patentee, beg to acquaint manufacturers and owners of steam-engines generally, that they are now prepared to construct furnaces, warranted to consume both heat and fuel, and to prevent smoke, by effecting a perfectly chemical combustion of the fuel.

This simple and effectual plan, which produces a great saving both to boilers and furnaces, and requires less attention from the fireman than usual, has received the unqualified approbation of the highest professional authorities and experienced engineers. It is applicable to marine, locomotive, and land engines; and furnaces of every description already erected, may be altered without difficulty at a moderate expense. Professor Brande, writing to the inventor, says:—"You convert what is commonly called smoke into fuel at the time when, and the place where, this combustion can be most effectively brought about." The patent furnace may be seen, and every information afforded on application to BROCKLEHURST, DIBBICK, and WYER, millwrights, engineers, and ironfounders, 12, Oil-street, or Elms Foundry, Vulcan-street.

HEIMANN'S NEWEST PATENT METALLIC WIRE

ROPE having been employed for several years in numerous mines on the Continent, have, from their great STRENGTH, combined with DUCTILITY and FLEXIBILITY, and COMPARATIVE CHEAPNESS, been found to possess considerable advantages over hemp ropes, as well as chains, for all mining purposes. They are also particularly adapted for STANDING RIGGING of ships, and for all purposes where great strength and durability are required, as, from the peculiar mode of their manufacture, they are completely protected against CORROSION. A manufacturer of these ropes is now being established near London, by Messrs. HEIMANN and KUPFER, by whom all orders will be promptly attended to. Any further information may be obtained, by applying to Mr. William Kuper, No. 26, Great Tower-street, where also specimens of the ropes may be seen.

NEW METALLIC ROPE.—NEWALL'S PATENT.—These

ropes have been found, by experience, to possess very great advantages over every other kind of rope or chain for mines and railways. They are STRONGER, LIGHTER, CHEAPER, and MORE DURABLE. Arrangements are being made for adequately supplying the demand. Parties requiring such ropes are requested to make application to the patentees, R. S. Newall and Co., Dundee, August 21.

ANDREW SMITH'S PATENT WIRE ROPE.—WILLIAM

FOX and CO. having obtained the exclusive license for MANUFACTURING the above ROPE, beg to inform the public that SPECIMENS may be seen at their office, No. 75, Old Broad-street, London, where every information may be obtained, and also at the following places:—

Fox, Hawkins, and Hickling, wire drawers, Birmingham.
Robertson and Co., 12, Gower Place, London.
Matthew Dunn, Liverpool.
Joseph Bower, Plymouth.
John Thompson and Co., Wigan.
Thomas Moseley and Sons, Dublin.
Coates and Young, Glasgow.
James Kibble and Co., Glasgow.
James Gunn, Leith.

The rope is now at work in various mines in different parts of the kingdom, and also on the Blackwall Railway, where it answers every expectation. It has been used in shipping five years.

Now ready, in one volume quarto, 600 pages, and seventeen splendidly executed engravings of the various classes of locomotive engines and carriages, a railway map of the United Kingdom, &c. &c., price 4½ lbs. 6d.

THE RAILWAYS OF GREAT BRITAIN AND IRELAND.

By FRANCIS WHISHAW, Civil Engineer.

Member of the Institution of Civil Engineers.

"No railway capitalist will remain long without it. It is a work of immense labour and research—rich in original and authentic information, and embellished with profusion with splendid engravings."—*Railway Times*.

"Particularly valuable on account of the original and authentic information it contains."—*Midland Counties Herald*.

"Useful to every class of persons interested in railway communication—a class which, in point of fact, includes almost every member of the community."—*Leicester Mercury*.

"Interesting to the general reader, from being interspersed with Mr. Whishaw's own remarks and observations, during his seven thousand mile railroad tour."—*Gardener's Gazette*.

London: Simpkin, Marshall, and Co.; and through all booksellers in the United Kingdom.

RAILBRIDGE ON MINES AND MINERALS.

Just published, in demy 8vo., price 2s. 6d.

A PRACTICAL TREATISE ON THE LAW OF MINES AND

MINERALS, comprising a detailed account of the respective Rights, Interests, Duties, Liabilities, and Remedies of Landowners, Agents, and Workmen; and of the Local Customs of Derbyshire, Cornwall, and Devon; with an Appendix of Legal Forms, relating to Grants, Leases, Transfers, Partnerships, and Criminal Proceedings.

By WILLIAM RAINBRIDGE, Esq., of the Inner Temple, Barrister at Law.

CONTENTS OF THE VOLUME.

1. On the general nature of Mines, Quarries, and Minerals.
2. On the right of Property in Minerals.
3. On the Rights of Mines.
4. On the right to work Mines.
5. On the Transfer of Mines.
6. On Leases and Licenses.
7. On the right to grant Leases and Licenses.
8. On Partnerships in Mines.
9. On the Injuries resulting from Mining operations.
10. On the Rights of Mines and Quarries.
11. On the Remedies relating to Mines and Minerals.
12. Local Customs.

LONDON: Henry Butterworth, Law Bookseller and Publisher, 7, Fleet-street.

LONDON AND WESTMINSTER WATER COMPANY.

—LAST DAY for the APPLICATION for SHARES, from the country the 20th, and in London the 20th inst.—To be empowered by Act of Parliament, for which notices have been given. Office, 7, St. Martin's place, Trafalgar-square.

Capital £200,000, in shares of £20 each.

Deposit (in order to comply with the Standing Orders), £5 per share.

PROVISIONAL COMMITTEE.

(From whom the directors will be elected.)

Sir Francis Burdett, Bart., M.P. Col. Dacre, 28, York-place, Portman-sq.

The Right Hon. Sir C. Grey, M.P. Thomas de Veer, Esq., Lisle-street and Kensington.

Sir Wm. Colebrook, 11, York gate, Regent's-park. C. M. Elderton, Esq., Lincoln's Inn-fields.

Sir Henry Hallford, Bart., M.D., G.C.H. William Evans, Esq., Milbank.

F.R.S., F.S.A. Wm. Gristhevalle, Esq., Camberwell-grove.

J. Humphrey, Esq., Alderman, M.P. R. Keate, Esq., Surgeon to the Queen.

P. A. Mackinnon, Esq., M.P. Capt. M'Dougal, Fir-grove, N. Brixton.

The Hon. Colonel F. H. W. Needham, G. Mackintosh, Esq., Up or Seymour-st.

Jermyn-street. P. Morrison, Esq., Princes-street, Bank.

The Hon. H. R. Westons, M.P. Dr. Paris, D-over street, F.R.S., F.L.S.

The Hon. Colonel J. C. Westons, M.P. Jeremiah Pither, Esq., 46, Russell-sq.

Major Adair, H.E.I.C.S. Dr. Hamilton, Esq., Hamilton-street, N. Brixton.

W. Chaplin, Esq., Lad-lane & Euston-sq. James R. Todd, Esq., Portland place.

John P. Clarke, Esq., Vincent-square, Westminster. Joseph Workman, Esq., Greenwich.

With power to add to their number.

Bankers—Messrs. Jones, Lloyd, and Co., Lombard; Messrs. Drummond and Co., Charing-cross.

Engineer—Robert Stephenson, Esq.

Solicitors—Messrs. Winter, Williams, and Williams, 16, Bedford-row.

The sub-committee, for the consideration of the applications for shares hereby give notice, that they will receive no more applications from the country after Tuesday, the 24th day of January instant, being the first day of the meeting of Parliament, or from persons residing in or near the metropolis, after the 30th day of January instant.

In the meantime, applications may continue to be made to any of the following members of the sub-committee:—William Chaplin, Esq., Lad-lane, and Euston-square; Thomas de Veer, Esq., Lisle-street, and Kensington; or Captain M'Dougal, Fir Grove, North Brixton; the solicitors, Messrs. Winter, Williams, and Williams; Dr. Hamilton, Esq., Hamilton-street; or G. W. Blanch, Esq., 7, St. Martin's place.

Committee-room, Jan. 14. By order of the sub-committee.

NORTH KENT RAILWAY.—EVERY INFORMATION

relative to this undertaking may be OBTAINED by application at the office, No. 42, Lombard-street, between the hours of Ten and Four o'clock daily.

IMPERIAL SLATE COMPANY.

To be incorporated by Royal Charter.

Capital £150,000, in 15,000 shares of £10 each—50s. 10s. paid.

DIRECTORS.

WILLIAM R. COLLATT, Esq., Chairman.

G. E. Britten, Esq. James Morgan, Esq.

G. Golding, Jun., Esq. Henry Newman, Esq.

Hon. R. E. Howard, Esq. F. W. Slade, Esq.

W. R. Tyrrell, Esq. S. Sanders, Esq.

At Derryville, Mr. J. Hare. At Goring, Mr. G. Crosby.

LOCAL ACTING DIRECTOR—James Morgan, Esq.

MESSRS. BARNES, WINTER, and BARNARD, No 2, Great Winchester street.

SALESMEN.

The Commercial Bank of London, and the Provincial Bank of Ireland.

OFFICES—43, Lincoln's Inn-fields, London; and at Derryville, Kilkenny, Ireland.

SECRETARIES.

H. C. Chaplin, Esq. Mr. William Headleach.

The object of the undertaking for which this company is formed, is the working to a considerable profit the valuable and extensive slate and flag quarries situated on the banks of the Shannon. The company was organized in March, 1839, and the working immediately proceeded with; a very large sum of money has been expended in railways and other permanent improvements, the fruit of which is yet to be reaped, notwithstanding which, and a powerful opposition heretofore to be noticed, the quarries have paid two dividends of 21 per cent. upon the capital expended. All persons at all familiar with undertakings of this description are aware of the many years which have invariably elapsed before any of the most fruitful slate quarries in the Kingdom have made any return upon the capital expended, and to such it will be unnecessary to point out the obvious earnest of success, and the fact presents to the shareholders.

The quarries are in themselves inexhaustible; the materials of great quality, in many respects superior to the best Welsh slate; the demand for home consumption is constant and increasing. Samples have been sent to America and the West Indies, where slate for roofing is comparatively unknown, and large orders have been returned; in addition to this, that the quarries are within a few hundred yards of the Shannon, only fourteen miles from Limerick, and it will be seen at a glance all the superiority which, in point of position at least, they possess over the great slate works in Wales. Those of Mr. Pennant and Anson Smith being respectively six and seven miles, whilst those in the Vale of Festiniog are at a far greater distance from any water carriage.

Such is the demand for slate and flags, that ships remain at anchor from three to four months waiting their turn for loading. It is justly to be expected that when once the Kilgobbin Slate Quarries become fairly known in the London market, shipowners and others will no longer neglect themselves to the loss and expense often upon so many months' detention, but will send direct to Limerick for an article in every respect equal to what Wales can afford.

Several engineers of eminence, and practical men of experience, have examined these quarries, and the profits anticipated from their calculation far exceed what it would be perhaps proper to expect to put in their result; however, of what the works have already produced, shows that their calculations are far from being speculative. The following are extracts from some of the above mentioned reports:—

Thomas Rhodes, Esq., C.E., reports as follows:—"The whole of these quarries are situated in the south east vale of the river Shannon, on the side of a hill elevated above the surface of the water from 200 to 250 feet, and its advantageously for lowering the slate by railway and machinery, at a small cost of about 20, per ton, ready to be sent off in barges to London and Dublin; &c., where they may be shipped off for distant parts of the world, by side-slip rails, running down the banks of the Shannon, and the whole of the interior of Ireland; the extent of the slate rock in any of the several properties is almost inexhaustible and may be worked for centuries. There is a great demand for slate, much more than they are in a condition to supply. The vein is good, the extent to which it may be worked is almost inexhaustible. I have no doubt the slate would meet with a considerable sale in England. There is every facility for working the quarries and producing sale in any extent."

Meant Rhodes, Esq., C.E., says in their joint report:—"Taking all the circumstances connected with these quarries into consideration, their situation, extent, capabilities of working, nature of stone, price of labour, facility of shipping, and the daily increasing demand for these slates, we do with much confidence and conscientiously recommend the parties for whom we are acting to invest capital in this undertaking, as likely to afford them immediately a fair per centage on their outlay, and it will very soon become a most profitable investment."

Henry Scope, Esq., reports:—"As regards the quality of the material to be produced, I have no hesitation in stating, that I consider the slate of this district fully equal to that of Mr. Pennant's quarries near Bangor. The situation is peculiarly favourable, affording every facility for a cheap and expeditious conveyance of the slate to the quay, where every convenience for the shipping of the same is to be found."

John Culbert, Esq., C.E., reports:—"As to the capabilities of the quarries, I consider the material to be of excellent quality for making roofing slates, and the quantity may be said to be inexhaustible; and I beg more to assure the company, that I have no hesitation in saying, that no quarry ever had out greater advantages for flag working."

Up to the present time, the company have had no contest against the formidable rivalry of the Mining Company of Ireland, who were working an extensive slate quarry in the middle of their works. This opposition is now at an end, the Imperial Slate Company having concluded an advantageous agreement with the mining company for the purchase of all their quarries and interest in the district, and have thus placed themselves in a prominent position as respects both price and labour.

The effecting this purchase, and the consequent necessity which exists for extending the operations of the company upon a very enlarged scale, so as to secure the advantages which the purchase of so valuable a property entails, has induced the company to effect an increase of the capital, by an issue of new shares, and the following resolution was accordingly considered at a special general meeting of the proprietors, convened for the purpose, at the Freemasons's Tavern, Great Queen-street, London, on the 28th December, 1840:—"That the capital of the company be increased from £100,000 to £150,000, and that the additional capital be divided into 15,000 shares of £10 each, and that the sum of £25,000 be paid upon each new share, to put them on an equality with the present shares; and that the holders of the new shares be entitled to all the advantages, and subject to all the liabilities, which holders of the present shares now are, and shall be, and of the same." In the event of these new shares not being taken up by the present proprietors, who are to have the option of so doing, an early application must be made personally, or in writing, to:

H. C. Chaplin, Esq., 43, Lincoln's Inn-fields.

R. Hunter, Esq., 10, Bank of Ireland, Limerick.

Messrs. Barnes, Winter, and Barnard, 2, Great Winchester street.

A. R. Collatt, Esq., Commercial Bank of London, 4, Moorgate street.

LONDON, December 21, 1840.

LAW INTELLIGENCE

ALLEGED MINING NUISANCE IN WALES.

COURT OF CHANCERY—JAN. 18.

WILLIAMS v. THE EARL OF JERSEY.—This was an appeal from the Vice-Chancellor, argued on Friday. The bill was filed to restrain an action at law brought by the defendant for an alleged nuisance created by the plaintiff to the defendant's property in Wales; and it also sought to have the injunction made perpetual. To this bill the defendant put in a general demurrer, which the Vice-Chancellor overruled.

The Lord Chancellor was of opinion that the order of the Vice-Chancellor was a proper one. The plaintiff, it appeared, were the lessors of mines situate on the property of the Duke of Beaufort. A portion of the land had been obtained from the defendant in exchange for other land, and the case made by the bill was that the defendant ought to have known that the mineral works in question were to be carried on, and that in point of fact he had for a long period acquiesced in their being so carried on. Now, if the court was to allow the demurrer, it would amount to a declaration of an opinion that there was no case for relief stated in the bill. There were, however, allegations in that bill which, if proved in evidence, would entitle the plaintiffs to sustain the equity they asserted, and under such circumstances the order of the court below must be affirmed, with costs.

LATE ACCIDENT ON THE LONDON AND BIRMINGHAM RAILWAY.

RAIL COURT—JAN. 18.

Sir William Follett applied to his lordship for a writ of *certiorari* to remove into this court the coroner's inquisition taken on the bodies of Joseph Simpson and William Dawson, the former of whom was an engine-driver, and the latter employed to assist him, on the above railway, and who were both killed by a collision that took place on the line. (The circumstances of this case were fully detailed at the time). An inquest was held on the bodies of the deceased persons before one of the coroners for the county of Middlesex, when the jury returned a verdict of wilful murder against Simpson, the engine-driver, as regards the death of Dawson, and of *felonia de se* as regards his own death. They also found that the engine was moving to the death of the deceased, and levied a demand of 2000*l.* upon the engine. The learned counsel said there were several objections to the inquisition on the face of it. The most important was that the jury, having found that a felony had in two cases been committed, could not afterwards find that, as in case of accident, the engine was moving to the death of the deceased. It had been laid down in *Coke's Institutes* and other authorities that no demand could be fixed by a coroner's jury except where the death of the party was caused by accident. In cases of the death being caused by felony it was well known that the party by whom the felony was committed had thereby forfeited all his goods and chattels, and no demand could thereby be levied on the goods. Another objection was that there was no allegation in the inquisition of the time or place, when and where, the deaths of the deceased took place. There were several other objections with which he did not think it necessary to trouble the court at present.—**Mr. Justice Williams**—You make take a writ.

GENERAL MINING ASSOCIATION.

COURT OF CHANCERY—JAN. 20.

TAYLOR v. RUNDLELL.—This case came before the court upon appeal from the decision of his Honour the Vice-Chancellor. The bill was filed by the late Sir Herbert Taylor and the other executors of his late Royal Highness the Duke of York, calling upon the defendant to account for the working of the mines of Cape Horn and Nova Scotia, which were granted by George III. to the Duke of York, and who had heard them to the defendants, who had formed a company to work them. The defendants put in their answer to the bill, in which they stated their inability to give a full account of the transaction, as the other members of the company who had not been made parties refused to give up the books. To this answer exceptions were taken for insufficiency, and a reference was directed to the Master to ascertain that fact. The Master reported the answer sufficient, but to that report exceptions were taken, which were allowed by the Vice-Chancellor, upon their being argued before him, and from that decision the present appeal was brought.

Mr. Wakefield and Mr. Wood were counsel for the appellants.

The Lord Chancellor, without calling upon Mr. Wigram, who was counsel for the respondents, ordered the appeal to be dismissed, thereby upholding the decision of the Vice-Chancellor.

IMPORTANT QUESTION AS TO APPLICATION OF HOT-BLAST.

COURT OF CHANCERY—JAN. 21.

NEILSON v. THOMPSON.—This is one of four appeals against orders of the Vice-Chancellor, pronounced by the Vice-Chancellor before the Christmas holidays. The plaintiff is the inventor of a new method of working furnaces for smelting iron by the means of pipes which convey hot air to produce the draft. This invention is secured by patent, and a number of licences have been granted for its use, the price of the licence being the payment of 1*s.* per ton for the iron made. The defendant in three out of the four suits is Mr. Alderman Thompson and his partners, who, with the plaintiff's permission, made some experiments in order to test the merit of the invention, and finding, as they allege, that it did not succeed, invented an apparatus of their own for the same purpose, and now claim to use it. The plaintiff conceiving his patent to be infringed, obtained an injunction from the Vice-Chancellor.

Mr. Wigram, Mr. Richards, and Mr. Rouse now moved to dissolve that injunction. They contended that the plaintiff could not maintain his patent, either on the ground of principle or apparatus. In principle it was the same as that of Mr. Besfield, who had obtained a patent for the same invention many months before the plaintiff; and in apparatus it was essentially different from that used by the defendants, as his lordship must clearly perceive from the models before him. If his lordship thought the plaintiff had any case, the defendants were quite willing to keep an account until the question was decided at law; but they hoped his lordship would not, by continuing the injunction, compel the defendants, at great loss, to extinguish their furnaces.

Mr. K. BAUER was proceeding to support the injunction, when

His Lordship, at half past three o'clock, postponed the argument.

JAN. 22.

Mr. K. BAUER, Mr. JACOB, and Mr. CAMPBELL, appeared for the defendants, Alderman Thompson and the other proprietors of the Pennycuik Iron Works. Sir J. Guest, as well as the defendants, and other ironmasters, had paid 1*s.* a ton for a licence to use the plaintiff's patent, and no argument had been offered why it should be discontinued. They prayed the continuance of the injunction, on the ground that it would prevent any inconvenience to the defendants, who might, without any alteration of machinery, use cold air, as they formerly did. On the other hand, if it were dissolved, it could not be expected that any masters of iron works would pay for licences.

The Lord Chancellor said, as the plaintiff only required his licence-money, he thought the injunction should be dissolved, if the defendants undertook to keep an account, and deal with the licence money as the court should direct. The iron masters had erected expensive machinery with the knowledge of Mr. Neilson, and it would be hard to prevent their using it now. The injunction, then, must be dissolved, the defendant undertaking to keep accounts, and the plaintiff going on with the action to try the right.

NEILSON v. HEMMAY.—This case being under the same circumstances, the same order was made.

NEILSON v. FOTHERGILL.—In this case there had been a direct contract to pay licence money, and it stands till this day (Saturday), in order to ascertain if Mr. Wigram took upon the injunction on reconsidering the affidavits.

MESSRS. PICKFORD AND THE GRAND JUNCTION RAILWAY.

COURT OF QUEEN'S BENCH—JAN. 21.

EX PARTE PICKFORD, IN RE THE DIRECTORS.—**Mr. CRESSWELL** showed cause against a writ which had been obtained for a mandamus ordering the defendants to allow Messrs. Pickford to carry goods on this line of railway on the same terms as other carriers. He contended that this was a case in which a mandamus was not the proper remedy, as it called upon the defendants to carry into effect the 27th section of their Act of Parliament, and in such a case the Court had held it would not interfere.

Lord DENMAN called on the other side to support the mandamus.

Sir F. Pollock, Mr. Richards, and Mr. Cardwell supported the rule.

The affidavits alleged that Messrs. Pickford and others were allowed to carry goods on the railway on better terms than any other carriers, as they were not compelled to change the trucks at Birmingham, and were charged a less price per ton.

Lord DENMAN said, that it did not appear that a proper demand and refusal had taken place, and therefore the rule must be discharged, but without costs.

CONVENTIONAL METHODS OF ASSAYING COPPER ORES.—A lecture on this interesting subject, with illustrations of the various tests employed for detecting some of the metals in solution, was delivered by Mr. J. H. Thomas, at the Truro Institution, on Thursday last. We shall endeavour to give an abstract of the lecture in our next.

ANONYMOUS SPECIMENS OF IRON.—**Mr. Follenberg** lately analysed this mineral from the Anzovs, and found its composition, since 31, protoxide of iron 62.5. The same mineral was discovered several years before by Dr. T. Thompson, and its composition found to be, silica 29.6, protoxide of iron 68.73. The latter specimen was obtained from the Mourne Mountains, Ireland.

INDEPENDENT AND WEST MIDDLESEX ASSURANCE COMPANY.

Sir PETER LAURIE came to the justice-room, at the Mansion-house, on Wednesday, and stated that he had a communication to make, which he considered to be one of public importance, and he was glad to see in the chair on the occasion a magistrate to whom the public were already under great obligations for the exposure of the scheme, called the British and Australasian Bank, 55, Moorgate-street.

Alderman PIRIE lamented that he had not succeeded in obtaining for the poor people, who had given their money for the letters of credit at the British and Australasian Bank, any part of the property they had risked. He regretted to learn that there were many other speculations by which persons with limited means had suffered considerably, and he should feel much gratification in contributing as much as lay in his power to the detection and exposure of the iniquities of the impostors who thrived by them.

Sir P. LAURIE stated, that he had to call the attention of Alderman Pirie to a company, which, for the extent of the robberies committed by the few individuals who established it, exceeded any thing within his memory. He had received the following note from the editor of a Scotch paper, and he had inquired into the particulars, and found them to be by no means exaggerated:—

"The editor of the Scotch Reformers' Gazette presents his respectful compliments to Sir Peter Laurie, and begs to call the attention of Sir Peter to an article in the paper, transmitted by this post, respecting the 'Middlesex Assurance' company, who have just absconded with about 2*l.* out of their victims' money! The 'Middlesex' are part of the same gang who had the unparalleled audacity to advertise the name of His Grace the Duke of Wellington as patron of a Loan Company and General Deposit Bank, formerly exposed at the Mansion-house. The Duke wrote to the editor of the Gazette, authorising him to expose the gang, which was done effectually in this quarter; but the press in too many places continued to publish the specious advertisements of the swindlers, and even to puff them, and hence the swindlers succeeded in pillaging the public to the above enormous extent."

The article alluded to, which contained an account of the flight of the directors of the company from their premises, 27, Baker-street, Portman-square, which were left without an atom of furniture or property of any kind, stated that the course of proceeding was most iniquitous. When the Scotch paper attacked the gang, they brought actions against the proprietors for damages to an enormous amount—took care to let the public know that they were appealing to the law for redress, and became more and more confident in the time of their addresses by advertisement, so that they made the very fact of the accusation against them instrumental to the attainment of their great object of plundering all ranks of the people. It was not supposed to be possible that an association, established in so respectable a part of the metropolis, constantly appearing before the public in expensive advertisements, and taking its own part in the most awful manner in the courts of law when any one dared to asperse its motives, could have been set on foot by the mere exertions of a couple of gentlemen's servants, and a couple of bankrupts in desperate circumstances, and carried on in the open day for the mere purposes of plunder. The fact, Sir Peter said, now stated the unfortunate annuities in the face. One of them had put into his hands the following memorandum, which Mr. Knowles, a partner in the company, had given to her, upon receiving from her the sum of 495*l.*, on which she had been paid at the rate agreed upon, until the bubble burst:—

"Mr. W. has this day deposited in my hands a check for the sum of 495*l.*, being the balance of purchase money for an annuity of 25*l.* during the life of Mrs. B. after, to which a deed will be delivered, duly enrolled in the Court of Chancery, by which this memorandum will be cancelled."

The distress occasioned by the flight of the company was, Sir Peter stated, indescribable. It appeared that the proprietors of the paper he had quoted had sent an agent from Glasgow to London, to institute the closest inquiry, and it had been ascertained by that agent, that all the directors had absconded, taking away with them upwards of 98,000*l.* of annuities, cash paid down to them in sundry sums by victims who, allured by their advertisements, had confided in them, exclusive altogether of the enormous amounts paid to them for their policies for fire and life assurance—the whole amounting to no less than 150,000*l.*

Alderman PIRIE said, that he had been informed of the very extensive ruin which had resulted from the confidence placed by the annuitants in the company. The directors, it appeared, had resided in splendid houses, and kept magnificent establishments.

Sir P. LAURIE said, he deeply regretted that he could not have the opportunity of determining on the disposal of those who were engaged in so nefarious a conspiracy. All he could do was to make the statement, and to caution the public on the subject of depositing their money in the hands of companies or individuals without the most indisputable evidence of their respectability. There were, he knew, several "flash establishments" in the metropolis at that moment obtaining large sums of money fraudulently. The ingenuity exhibited in the management of the concern, relative to which he appeared at the Mansion-house that day, was very remarkable, but crimes of ingenuity were on the increase. The Independent and West Middlesex Assurance Company pretended to have been established in 1696, with a capital of 1,000,000*l.*, and here it ended with all its professed advantages, after having really existed no more than four years, during which period it was engaged in plundering the public and enriching a few miscreants, who were at that moment enjoying the fruits of their iniquity.

Mr. HOLMES said, that he had received a letter from Glasgow on the subject, stating that a disclosure of what had taken place would be likely to be serviceable to the public, and it was his intention to lay it before the Lord Mayor, in order that, through the press, the circumstance might obtain publicity.—**Sir P. LAURIE** said, that in all probability some of the particulars cases of plunder would be mentioned before him at the Mansion-house. He understood that the chief actors in the business had betaken themselves to the continent.

[The company was originally projected by four individuals of very doubtful character, when advertisements and prospectuses were issued, by which the "company" professed to be constituted under various Acts of Parliament, and an imposing array of names announced as directors, many of which were chosen as being identical with those of well known and highly respectable gentlemen in London. Suspicion was at an early period excited, by the low rates at which the company transacted business; and it soon became known that the individuals who were put forth as directors, were not the well-known gentlemen of the same names. At the outset, Messrs. Coutts and Co. were announced as the bankers of the concern, but they soon ordered their names to be withdrawn from the advertisements. The company then put forward the Bank of England, who, after making inquiry regarding the parties, ordered the account to be shut. The Western Bank of Scotland, who had been announced as the Scottish bankers, were obliged to threaten proceedings before they could get their names withdrawn. Notwithstanding these adverse occurrences, and in the face of an exposure made in Glasgow, the company still went on; and their gains, from what has transpired, must have been considerable. It appears, by a search made at the Enrolment-office, Chancery-lane, where all annuity bonds are registered, that, down to the month of November, 1840, the sum of 98,000*l.* had been paid into the concern for the purchase of annuities. The money received in the shape of premiums for fire and life assurances must also have been large; and, although no correct approximation can be made, it does not seem improbable to estimate their total gains at somewhere about 200,000*l.*]

SPONTANEOUS GAS LIGHTING.—The project of applying gas in its natural state, as generated in the coal-mines, to the purpose of giving light, has, within the last few days, been brought into partial operation. The gas has been brought from the Wall's End pit in pipes, to the Newcastle and North Shields Railway. Some lamps are lighted with it nightly at the sides of the railway near Carville, and in the station house there. The light may possibly answer the purpose to which it is applied—that of illuminating the railway even for its entire length, as well as all the stations; but it is by no means to be compared in brilliancy with the gas supplied in Newcastle and the surrounding towns. The experiment, it is but fair to admit, is only yet in its infancy; but before the gas drawn from coal mines can, in our opinion, be applied in the manner contemplated by the projector—namely, to the public and private lights of the towns of Newcastle, Shields, and Sunderland, two important points must be compassed. First, the enormous quantity of gas nightly required must be permanently secured, which we believe to be impracticable; and, secondly, it must be purified, as it is at present, by the gas companies, which of course is quite possible, but would be nugatory if the great essential of certain and almost unlimited quantity cannot be obtained.—*Times Mercury.*

MINERALS IN AMERICA.—(Extract from a Letter.)—"There are in the twenty-six States about 80,000 square miles of coal and iron of the richest character, and waiting only for an increase of capital, skill, and experience to work them up to an extent equal to our consumption. As to coal, we produce nineteen-twentieths of all we consume, and of iron, perhaps three-fourths; but its distance prevents the free use made of it in England. In Pennsylvania alone, it is computed there are 10,000 miles of coal and iron, being about five times the extent of the coal and iron of the United Kingdom. We are now opening copper mines, and they begin to be profitable."

IRISH SOUTH AND SOUTH-WESTERN RAILWAY.—A public meeting of the inhabitants of the barony of Kinsarty was held in the market-house of Thurles, on the 5th instant, for the purpose of considering the expediency of having petitions presented to both Houses of Parliament, in favour of the line of railway laid down in the report of the commissioners; the said line commencing in Dublin and proceeding through Thurles, Helyore, and Cashel to Cork. The meeting was respectably and numerously attended.—*Newspaper.*

MINING CORRESPONDENCE.

ENGLISH MINES.

WEST WHEAL JEWEL MINING ASSOCIATION.

Jan. 18.—Ground more favourable in Buckingham's engine-shaft, and also in fifty-seven south cross-cut, than last reported. Forty-two Fathom Level East, on South Lode—Lode improved, containing good stones of ore. Forty-two Fathom Cross-cut South, on Little Cross-course—Ground still favourable. Thirty Fathom Level West, on South Lode—Lode worth 5*l.* per fathom. The rise in back of twenty, on same lode, is suspended for want of air; the men are about to resume driving the twenty fathom level on the same lode. The deep adit west, on the same lode, is worth 7*l.* per fathom—ground somewhat harder. The lode in the back of this level is worth 7*l.* per fathom. Twelve Fathom Level West, on Wheal Jewel Lode—Lode worth 5*l.* per fathom—ground more favourable. Deep Adit Level West, on same Lode—Lode worth 10*l.* per fathom. **S. LEAN. R. JOHNS.**

WHEAL LEADS MINING COMPANY.

Jan. 10.—On looking at our various levels, I never knew them looking better, generally, with every fair prospect of an increasing quantity of ore, and our next sampling will be about 100 tons—average 6*l.*, or upwards—which I expect will meet the expenditure of November and December, 1840, to within 100*l.*; and when the wine from the seventy to the eighty fathom level is communicated, and the lode cut good in the fifty cross cut (which we have reason to expect will be the case), I hope you will be able to raise sufficient ore to pay expenses, at least, and by the extension of the said levels, the quantity of ore will, no doubt, increase. I hope also to reduce the cost a little ere long, and you may rest assured on my paying particular attention to this mine. I can assure you that the agents are very attentive, and are doing all in their power. I need not enter into a detail of the levels, as you have the particulars in my son's report, which I have seen. Allow me to state, that the mine still deserves your attention, and I hope will, ere long, prove profitable. **W. RICHARDS.**

Jan. 16.—We sampled in all ninety-six tons of ore. We expected to sample 100 tons rough, and about ten tons stamped ore, but from the severity of the weather we could not dress all we had at surface. Eighty Fathom Level West—Lode still disordered. Rise in back of ditto east—Lode one foot wide, with a good branch of ore, six inches wide on south side. We have cut the branch of spar we bored through in the cross cut at eighty fathom level—it is not worth noticing; these men I shall put on Monday to bore on seventy fathom level, to communicate with rise in eighty fathom level east. Seventy Fathom Level West—Lode fifteen inches wide, producing one ton of ore per fathom. Seventy Fathom Level East—Lode eighteen inches wide, producing one ton of ore per fathom. Sixty Fathom Level East—Lode eighteen inches wide, producing one ton of ore per fathom. Sixty Fathom Level West—Lode ten inches wide, very kindly. We have cut a branch of ore six inches wide, in the cross-cut at fifty fathom level; we shall bore three feet more on Monday, to ascertain whether we have all the ore. **C. H. RICHARDS.**

HOLMBUSH MINING COMPANY.

Jan. 18.—Hitchens's shaft is sunk to a depth of forty-two fathoms one foot six inches—ground favourable. In the 100 fathom level, west of engine-shaft, the lode is sixteen inches wide, worth 25*l.* per fathom. Wine below this level—Lode ten inches wide, producing a small quantity of ore. Ninety Fathom Level West—Lode ten inches wide, worth 5*l.* per fathom. Wine below this level—Lode two feet wide, worth 50*l.* per fathom. Eighty Fathom Level West—No alteration worthy of remark. Ditto East—Lode ten inches wide, at present poor. Wine below this level—Lode fourteen inches wide, worth 10*l.* per fathom. Western Stopes, in back of Eighty Fathom Level—Lode still a rich course of ore, two feet three inches wide, worth 35*l.* per fathom. Eastern Stopes, in back of ditto—Lode one foot four inches wide, worth 25*l.* per fathom. Seventy Fathom Level Stopes—Lode two feet wide, worth 25*l.* per fathom. The tribute pitches are without important alterations—still, upon the whole, looking well. **FRANCIS PHILLIPS.**

TRETOFT MINING COMPANY.

Jan. 18.—Lode in engine-shaft about fifteen inches wide, producing some good ore, much improved in the past week; ground in shaft not so hard as usual. Lode in thirty fathom level, west of John's shaft, eighteen inches wide, unproductive. Lode in thirty fathom level, east of engine-shaft, small and unproductive. Lode in twenty fathom level, west of John's shaft, nine inches wide, tribute ground. Lode in twenty fathom level, east of William's shaft, nine inches wide, very good tribute ground. Lode in the rise, in back of this level, fifteen inches wide, very good tribute ground. Lode in ten fathom level, east of William's shaft, four inches wide, tribute ground. Lode in adit end, east of William's shaft, six inches wide, unproductive. **H. WILLIAMS. J. MORCOM.**

TRELEIGH CONSOLIDATED MINING COMPANY.

Jan. 16.—I have nothing new to communicate respecting Christie department, but the appearances of Shinger south lode, west of Good Fortune, at the twenty and thirty-four fathom levels, are cheering; the twenty is worth about 5*l.* per fathom, and the thirty-four about 10*l.*; we have holed the wine from adit to the twenty fathom level, and set a pitch to six men, at 6*s.* 8*d.* in the 1*l.* **W. SINCOCK.**

GREAT WHEAL CHARLOTTE MINING COMPANY.

Jan. 16.—I beg to hand you a brief report of our different levels. The lode in the engine-shaft still continues large, but unproductive. The lode in the seventy-two fathom level west is from five to six feet wide, producing four tons of ore per fathom. The lode in the seventy-two fathom level east is from six to seven feet wide, and the south wall has not yet been seen—it is still unproductive. The lode in the western wing, sinking under the sixty-two fathom level, is about five feet wide, yielding about five tons of ore per fathom, worth about 4*l.* per ton. The lode in the eastern wing is six feet wide, with a good branch of ore to the south, five inches big; the remainder of the lode is poor. The stopes in the bottom of the sixty-two fathom level will at present turn out from four to five tons of ore per fathom, worth 4*l.* per ton. The stopes in the back of the same level are much the same as when last reported, yielding about two tons per fathom. In the dressing department we are still much hindered by the severity of the weather; our floors, at present, are completely filled up with work under and, and as the weather has been for the last two or three days, it is quite impossible for the girls to stand on the floor to work. We have upwards of 600 kilbles underground broken ready to draw. **S. TREVEYHAN.**

REDMOOR CONSOLIDATED MINING COMPANY.

Jan. 18.—The north engine shaft is sunk 8*ft.* 3*ft.* below the forty fathom level, and should the ground continue favourable we expect to be sufficiently deep for a fifty fathom level in the early part of the ensuing month. In the forty fathom level cross-cut, nothing new has been discovered in the past week; the ground at present is rather hard. In the thirty fathom level east, we find the ground is presenting an appearance somewhat more favourable than for some time past; not any of the lode has been broken since my last. In the end, driving north on the silver-lead lode at this level, the prospects are much the same, lode about six inches big (lead), but, in consequence of bad air, we have suspended this end for the moment, and applied those men to rise on the course of the lode, for the purpose of opening a communication with the wine partly sunk below the twenty fathom level, which, when performed, will ventilate the principal part of the mine, and is, therefore, of importance. In driving south, on the silver-lead lode, at the twenty fathom level, the lode is from four to six inches in width, saving work. The pitches working on the Great South Copper Lode, at the twenty fathom level, are looking favourable, and yielding some good work for copper ores. Harl Down adit shaft is sunk 22*ft.* 4*ft.* below the surface, but owing to the abundance of the water we are obliged to abandon the shaft, and return to the rise; we calculate rising seven fathoms more will communicate with the said shaft. We have now two parcels of copper ores ready for sale, computed 26 tons 7 cwt.; No. 1, 12 tons 1 cwt. 3 qrs.; No. 2, 14 tons 5 cwt. 1 qr. **SAMUEL HARTUP.**

UNITED WILLS MINING COMPANY.

Jan. 19.—Adit End East—Lode three feet wide, coarse in quality. Adit End West—Lode two feet wide, with stones of ore. Ten Fathom Level, Eastern End—Lode 2*l.* 6*in.*, w. dr. chiefly composed of mudstone. Thirty Fathom Level—Lode two feet wide—10*l.* 6*in.* good ore. Thirty-six Fathom Level—No alteration in either end since last week. Forty Fathom Level, Eastern End—Lode three feet wide—two feet good ore. Stopes, east and west of Webber's Wine—Lode three to four feet wide, producing ore of a fair quality. Eastern Shaft—We are obliged to suspend this shaft on account of the water. Fifty Fathom Level, west of Diagonal Shaft—Lode four feet wide, ore throughout. East of Williams's Shaft—Lode two feet wide, producing some stones of ore. Williams's Shaft—No lode broken here since survey day. Sampled 370 tons of ore. **C. PENROSE.**

FOREIGN MINES.

CANDONGA MINING COMPANY.

Candonga, Sept. 12.—*Moss Motive Shaft, Deep Adit.*—In the cross-cut, driving at the bottom of Jenkins's wine, the ground is very hard, as is generally the case at this level, in this part of the mine.

Or Shaft, Twenty-seven Fathom Level.—In the cross-cut we have reached the foot wall of the wine. We shall continue to carry this cross-cut on to ten or fifteen fathoms further, in order to ascertain if the wine is divided into two separate bodies, as we are led to believe from the surface over this point.

No. 2 Place of Trial.—The ground in this place, during the last few days, has been something harder; after we pass this point we shall then be near the great or main branches.

stating that the crops generally in the colony had been injured by scorching winds, and eaten by caterpillars, but the prospects for 1840 were more encouraging; that on the 10th April he wrote, stating that 150 acres of the company's land had been prepared for seed. The total number of sheep on the 31st December, 1839, was 65,027—horses and ponies, 541. The total amount realised from sale of stock for 1839 was 17,542l. 16s. 8d., and produce of estates, rent, &c., 1518l. 6s. 6d. The stock sale at Maitland, for 1840, would realise net about 9500l.; the quantity of coals sold showed an increase of 2345 tons over the previous year; the clip of wool produced 655 bales, 609 of which had arrived, and produced the sum of 10,632l. 10s. 5d.; 209 hides and 380 horn tips had been imported—the former produced the sum of 103l. 12s. 1d. The total revenue of the company was 44,117 l. 13 s. 7 d. Expenses of management in New S. Wales... £18,516 15 5
ditto ditto in England... 2,494 8 8—21,001 4 1

Balance... £20,116 9 6

They, therefore, recommended the payment of a dividend of 35s. per share for the year 1839, equal to 6l. 4s. 6d. per cent. on the paid-up capital, payable on the 30th inst. The estimated value of property was as follows, viz.:—Land, 425,000l.; coal mines, 100,000l.; all other description of property, 238,328l. 9s. 8d.—Total, 763,328l. 9s. 8d. The outlay of capital having been 310,617l. 9s. 8d., the directors confidently anticipated that the present aspect of affairs will prove highly satisfactory.

Three directors and four auditors, who went out of office by rotation, were re-elected. The report was unanimously received and adopted, and the dividend declared. A vote of thanks to the directors was then moved by S. Mills, Esq., seconded by W. Hammond, jun., Esq., and carried unanimously. The CHAIRMAN replied, and the meeting separated.

PUBLIC COMPANIES.

MEETINGS.

ENGLISH COPPER COMPANY.—The court of assistants of the English Copper Company hereby give notice, that a SPECIAL GENERAL COURT will be held at their house, No. 27, Upper Thames street, on Tuesday, the 29th of January instant, at Twelve o'clock precisely, for the election of a governor and six assistants, for the remainder of the year, in the room of the governor and six assistants who have resigned.

English Corner Office, Jan. 7.

HOLMBUSH MINING COMPANY.—The directors hereby give notice, that a SPECIAL GENERAL MEETING of the shareholders will be held, at the office of the company, on Tuesday, the 9th day of February next, at One o'clock precisely, the purposes of which may be known on application at the office of the company.—25, New Broad street, Jan. 20.

LONDON AND BIRMINGHAM RAILWAY.—Notice is hereby given, that the BOOKS for the REGISTRATION of the TRANSFER of SHARES of this company will be CLOSED from Saturday, the 30th of January, to Saturday, the 12th of February, 1841, inclusive.

By order, RICHARD CREED, Secretary.

LONDON AND BIRMINGHAM RAILWAY.—Notice is hereby given, that the FEBRUARY HALF YEARLY GENERAL MEETING of the court of proprietors of the London and Birmingham Railway Company, will be held at the Queen's Hotel, Birmingham station, on Friday, the 12th of February next, at Eleven o'clock in the forenoon. The chair will be taken at Twelve o'clock precisely.

JOSEPH F. LEDHAM, Deputy-chairman, } of the board of directors.
By order, RICHARD CREED, Secretary.

Office, Euston Station, January 13.

CALLS.

TRELEIGH CONSOLIDATED MINING COMPANY.—The period for payment of the TENTH INSTALLMENT of FIVE SHILLINGS per share having expired on the 20th of December last, notice is hereby given, that all shares upon which the said installment shall not be paid at the bankers of the company, Messrs. Vere, Bayle, and Co., Lombard street, on or before the 20th instant, will be absolutely FORFEITED.

By order of the board, ROWLAND NICHOLSON, Sec.

DIVIDENDS.

CONSOLIDATED COPPER MINES OF COBRE ASSO CIATION.—Notice is hereby given, that a DIVIDEND of THREE POUNDS per share will be paid to the holders of certificates in this company, at the office of the secretary, 25, Abchurch-lane, on and after the 31st day of January instant, between the hours of Eleven and Three o'clock. The proprietors are requested to leave their certificates at the office for examination three clear days before the day of payment.

By order of the court of directors, W. LECKIE, Secretary.

HOLMBUSH MINING COMPANY.—The directors hereby give notice, that a DIVIDEND of ONE POUND per share will be paid, at the office of the company, on Thursday, the 25th of February next, between the hours of Eleven and Three o'clock. Share certificates to be left the preceding Tuesday, but within the same hours.

ROYAL SANTIAGO MINING COMPANY.—Notice is hereby given, that the SIX MONTHS' DIVIDEND of TWO POUNDS per share, on the shares of this company, declared at the meeting on the 6th instant, is now in course of payment, at the office of the company, 35, Broad street buildings. The dividend warrants must be left at the office three days before the day of payment.—Jan. 19.

WICKLOW COPPER MINE COMPANY.—A DIVIDEND of SEVEN AND A HALF PER CENT. out of the profits of the half year, ending 1st September last, has been this day declared by the Wicklow Copper Mine Company, which will be payable on and after the 15th day of February, at No. 11, Lower O'Connell quay; and in London, at No. 22, Tokenhouse-yard.

Dublin, Jan. 14.

LONDON AND WESTMINSTER WATER COMPANY. Various statements having been inserted in the public papers, to the effect that, during the execution of the experiment which was ordered to be made by the Chairman of the Select Committee of the House of Lords for the Supply of Water for the Metropolitan in Bushy Hill Meadows, the works in this town and neighbourhood were affected by the operations of the steam engines, this is to certify, that throughout the notice period that the engines were at work, we, the undersigned witnesses, found no difference in our supply of water:—

Richard Stoebe, Chalk hill, Bushy	Mr. William Bellis	Richard Mayer
Bushy, Heats	W. Roads	D. uet Warren
R. Tims	John Mayes	Barth Aston
Blad. Riggs	John Miller	Joseph Wilkes
Bushy Smith	George Hesley	R. Ryden
John Pitt	S. Mayes	Mrs. Wilson
William Howard	George Poulton	James Cole
William Abbott	John Holmhead	Robert Copeland
Stephen Tucker	George Pope	John Pope
James Smith	William Keop	George Allen
Thomas Hawthorn, sen.	Thomas Ambrose Han-	Thomas Christman
Edward Uchey	shaw, jun.	Charles James
Francis Colby	John Peacock	Samuel Elias
Mary Haly	Thomas (id)	Henry Kingham
Samuel Clibby	Joseph Stone	George Pollock
Elizabeth Sutton	S. Nales	Charles Whitaker
Samuel Groom	Ann Toppin	Ann Bquire

Memorials and certificates to the same effect were received from the following individuals:—

John Chapman, Chalk hill, Bushy	Ann Hawthorn, Chalk hill, Bushy
William Pugh	A. M. Hawthorn
Elizabeth Buckland	John Spence
J. Bils	John Bell
W. Pitton	John Leman
M. Wilkinson	Eliza Kempsor
William Brown	

At a meeting of the provisional committee of the London and Westminster Water Works, held at the office of the Company, this day, the above documents were laid before the board, and were ordered to be inserted in all the daily papers.

WINTER, WILLIAMS, & WILLIAMS, Solicitors to the Company.

London and Westminster Water Works Office, No. 1, St. Martin's place, Jan. 11.

THE PATENT SAFETY FUSE. FOR BLASTING ROCKS IN MINES, QUARRIES, AND FOR BURNING OPERATIONS. This article is the safest, cheapest, and most expeditious mode of effecting this very hazardous operation. From many testimonies to its usefulness, with which the Manufacturers have been favoured from every part of the kingdom, they select the following letter, recently received from John Taylor, Esq. F.R.S., &c. &c.:

"I am very glad to hear that my recommendations have been of any service to you. They have been given from a thorough conviction of the great usefulness of the Safety Fuse; and I am quite willing that you should employ my name as evidence of this."

Manufactured and sold by the Patrons, RICKFORD, SMITH, and DAVEY, Cambridge, & Co.

THE INVENTORS' ADVOCATE, AND JOURNAL OF INDUSTRY. A WEEKLY BRITISH AND FOREIGN MISCELLANY OF SCIENCE, INVENTIONS, MANUFACTURES, AND ARTS. It is the most useful and comprehensive work of the kind published. It contains the scientific intelligence of the week; correct information on railways and steam navigation; that of patents granted and applied; specifications and descriptions of new inventions; reports of scientific meetings; and original papers on manufactures and the arts, with a variety of interesting information to inventors and producers. It is not only a journal of interest for the day, but a standard work of reference, valuable to persons engaged in scientific, manufacturing, and mechanical pursuits. Vols. 1 and 2, nearly bound, are already published, and the 3d Vol. is now in course of publication. The subscription price, per annum, is 5s. 6d. in advance, or 10s. 6d. per annum, by the post, at the patent office, No. 125, Strand, London.

BLAENAVON IRON AND COAL COMPANY, under Royal Charter.—The directors are now ISSUING DEBENTURES, to a limited amount, at 6 per cent. per annum, interest payable half-yearly. Applications for the same may be made to the solicitor of the company, Isaac Sewell, Esq., 25, Throgmorton-street; or to the secretary, at the offices of the company, 4, Pancras-lane.—Jan. 7.

W. H. WEST, Secretary.

NOTICES TO CORRESPONDENTS.

With our next Journal will be published, on a stamped separate sheet, the Title and Index to the Tenth Volume; any irregularity in its delivery by agents can be rectified on application at the office, where a supply will be kept, to prevent the disappointment experienced on former occasions, from neglect in not forwarding it with the Journal.

The communication of "One Interested in the Importation of Foreign Copper Ores," on the "State of the Law affecting the Copper Trade," in our next.

Errata.—In Mr. Martin J. Roberts's communication, "On Assaying Copper by Electro-Chemical Action," inserted in the Journal of last week, page 22, 34th line from top, for "take your positive cylinder, and put it in a small bladder, &c.," read "take your positive cylinder, and put it in a small bladder, &c.," same page, 22d line from top, for "I shall describe the last method," read "I shall describe the best method."

We were unable to get the diagrams in Mr. John Phillips's letter finished in time for our present publication.

Messrs. Leach's Monthly Report of the Duty performed by Cornish Steam Engines, the Proceedings of the Geological Society, together with several communications received by this morning's post, are necessarily postponed.

THE MINING JOURNAL, Railway and Commercial Gazette.

LONDON, JANUARY 23, 1841.

Having before us Mr. RICHARDS'S "Annual Sheet" of the Exports of British and Foreign Metals, with much other valuable information, and statistics having relation to foreign and home production, we have, with some care, endeavoured to furnish, in our columns of to-day, an abstract of the paper, which enters too much into detail to admit of insertion. The results afford important data to the merchant and manufacturer, and we have, therefore, rendered them in a tabular form, which will be found comprehensive in furnishing the varied information, and enabling those interested to draw their own deductions, without regard to any observations we may feel called upon to make.

With reference to our exports, it will be seen that a decrease has taken place to the following extent:—In iron, 5172 tons; steel, 744 tons; copper, in sheets and nails, 24 tons; tin, in blocks and bars, 1042 tons; tin plates, 6764 boxes; lead, in pigs, &c., 357 tons; and in quicksilver, 217,142 lbs., while the increase has been confined to cake copper and spelter—the excess of the former being 182 tons, and that of the latter 80 tons. On this, as other results shown by the tabular statements in our columns, we shall hereafter have more to say. We now arrive at the quantities of foreign metals on which duty has been paid for "home consumption" during the past twelve months, and here we again find that a diminution has taken place in every instance, with the exception of copper—too insignificant to notice—the decrease being as follows:—Iron, 6389 tons; steel, 19 tons; lead, 5 tons; spelter, 135 tons; and quicksilver, 103,869 lbs. The next table which presents itself is a statement of the stocks of foreign metals on hand on 1st January, 1839, and January 1st of the present year, as showing the increase or diminution—the increase being confined to steel, 100 tons; tin, 75 tons; and quicksilver, 540,000 lbs.; while the decrease in the stocks is—Iron, 125 tons; copper, 950 tons; lead, 800 tons; and spelter, 1720 tons. The prices of the metals, which are likewise introduced, are distinguished, showing the highest, lowest, and average price—thus combining much useful and interesting information. To afford the means of arriving at those conclusions, whereby our readers may judge of the causes to which are to be attributed the very considerable decrease in some instances of our exports, as also the increase in others, we have appended an abstract of the tables referred to, on which we now proceed to offer some observations.

Although the deficiency of our exports in iron appears on the aggregate to amount to only 5172 tons, it will be observed, on reference to the explanation appended to the tabular matter referred to, that the quantity taken by the United States in 1840 was less by 24,712 tons than that of the preceding year; and that France and the Netherlands also reduced their imports by 3014 tons—thus making a reduction in our exports to these three places alone of 27,726 tons. On the other hand, however, it is gratifying to find that Madras and Calcutta doubled their importation of the preceding year, the quantity for 1839 being 7877 tons, and, for 1840, 15,715 tons, or an increase of 7838 tons. Again, Bombay, which took in 1839 only 5542 tons, advanced in the past year to 10,613—being a surplus of 5071 tons. New South Wales, in like manner, doubled its quantity, the respective amounts being, for 1839, 2147 tons, and, for 1840, 4321 tons, or an excess of 2174 tons—thus equalising to a considerable extent the decrease. With reference to copper, little or no variation has taken place as to the excess or diminution in our exports to the several ports, which, with a trifling difference, are the same as those of the preceding year. In tin plates there has also been a falling off in the United States to the extent of 13,032 boxes, and Trieste 3390; these, however, have been, in some degree, met by increase at other foreign ports. In tin (blocks and bars) the decrease amounts to 1042 tons, or 35 per cent., on the exports of the preceding year. With respect to lead, the decrease on balance is only 337 tons, but, on reference to the tables, it will be seen that Russia, which in 1839 took 2150 tons, imported only 438 tons in the past year—thus making the considerable difference of 1712 tons; France, on the other hand, nearly doubled the quantity of its import, that for 1839 being 1242 tons, and for 1840, 2282 tons—giving an excess of 1040 tons. Spelter (or zinc) shows a decrease in our exports to France of 308 tons, which is explained by that metal being transported direct into that country from Belgium, &c.—the application and use of which has very considerably increased; the diminution must not, therefore, be attributed to want of demand, which, indeed, would be contradicted by the price it has attained during the past twelve months, being now (for delivery) 26l. per ton, or an advance of 20 per cent. If, however, there has been a diminution in this instance, it is counterbalanced by an excess in shipments to Madras, Calcutta, and Bombay, the quantity taken in 1839 being 1538 tons, while the exports for 1840 were 2627—giving an increase of 1089 tons; the United States also, which in 1839 took only 28 tons, increased in 1840 to 273 tons; the larger quantity, although insignificant compared with the consumption of

England and France, which may be taken at 20,000 tons per annum, however, affords proof of its extended application in other countries. The exports of quicksilver have been subjected to a decrease of about one-tenth, Mexico alone having diminished from 331,808 lbs., being the returns for 1839, to 175,923 lbs.—leaving a difference of 155,885 lbs. Chili and Peru have also fallen off 179,797 lbs.; while the principal increase is with France of 125,730 lbs., and to the Netherlands, Hans Town, &c., 148,930 lbs.

The duty paid on foreign metals for home consumption shows, in like manner, a decrease—iron being 33 per cent. less; spelter with the slight diminution of 135 tons, which, however, is met by a decrease in stock on hand of 1720 tons—thus making, virtually, an increased consumption of 1585 tons; in quicksilver the decrease is 103,869 lbs. The stocks of foreign metals present generally a decrease—copper 950 tons, lead 850 tons, and spelter, as already remarked, 1720 tons, there being an increase in quicksilver, which, with the reduction in our exports, must have, we should imagine, an effect on the current price of that article, although the demand is said to be steady; in 1838 the stock was only 20,000 lbs.; in 1839, 160,000 lbs.; and, on 31st December, 1840, it had increased to 700,000 lbs. The statement of prices of metals show the extremes, with averages for the past twelve months. Bar-iron has fluctuated between 7l. 15s. and 9l. 15s. per ton—copper between 91l. and 98l., the present price being 100l. Tin advanced from 78l. to 84l., but is now somewhat lower, being quoted 82l.; lead, which was at one time 17l. 10s., has been done at 20l. per ton, the present price being 19l. 10s.; spelter may be quoted 24l. in bond, being an advance of 4l. per ton; quicksilver ranging from 3s. 10d. to 4s. per lb.

In closing our remarks on the tables to which we have made reference, some observations may be expected from us as to the state of the markets, and the appearance they present, we, therefore, give the substance of the information gathered from varied sources, believing it to afford a correct view of our present position. The stock of foreign iron has been, in some degree, reduced by purchases made within the last few days, and prices are firm. British iron fully maintains its price, and sales have been made at an advance—orders having come in from the United States and the East Indies; the quantity shipped to the former, during the past twelve months, showing a very considerable falling off—the exports for 1839 being 49,001 tons, and for 1840, 24,289 tons, or a decrease of 24,712 tons. Swedish steel, the stock is small, quoted prices being readily obtained—business, however, limited. In copper the market is brisk, with few sales. Tin cannot be said to have an equally firm appearance as other metals, although the "tanners" ask full prices; in this trade the nature of the business doing between the houses and the opposition is well understood; offers are not, we believe, refused by the smelters when coming near the price—on the other hand, we understand the Tanners' Company "hold out." British lead is improving in value; the stock of Spanish is much reduced, if not entirely exhausted—purchases having been made "for arrival." The stock of spelter, as shown by the tabular matter, inserted in another column, it will be seen, was reduced from 3650 tons to 1930 tons, and which, we are given to understand, does not at this moment exceed (if it amounts to) 1000 tons—the greater proportion of which are in quiet hands; the price of this article is 24l. in bond (or 26l. per ton), with every prospect of advance. Quicksilver offers no room for remark, beyond quoted prices being readily obtained, the demand being steady.

We have thus endeavoured to present to our readers a review of the past year, as affects metals, and have put together such remarks as appeared to us necessary for the elucidation of the tables, or to condense the matter most important. We shall endeavour, in an early Number, to render explanation of the causes of decrease of export, as also the consequent effect produced in other departments connected with this branch of metallurgical science, to which the columns of the MINING JOURNAL are devoted. We purpose following up our present remarks and tabular matter, by giving further statistics, embracing the past seven years, which, we doubt not, will be found equally interesting, as a record of such nature must be considered important.

RAILWAY BETWEEN ENGLAND AND SCOTLAND.

On Friday, the 1st inst., Sir Frederick Smith went by Hamilton to Lanark, and, on the 2d, he went by one of our railways to Airdrie, on the opposite of Clyde, and this week he was to be again at Lanark. When the inspection is completed, Sir Frederick will then have before him the whole four lines, the merits of each of which are strongly advocated by their respective supporters.

1. The east line, from Edinburgh, by Dunbar and Berwick, to Newcastle, which its supporters hold as the best line between the two capitals—London and Edinburgh.

2. The east midland line, from Edinburgh, by Galashiels, through Roxburghshire and the North Tyne, joining the Newcastle and Carlisle Railway at Hexham, about forty miles from Carlisle. This is held out as giving Edinburgh the advantage of communication both to London by Newcastle, and to Liverpool and Manchester by Carlisle.

3. The west midland line, from Carlisle by Beattock, through Clydesdale, to Edinburgh and Glasgow, by two diverging lines of thirty miles each, from Symington, in this county, or a point on the Clyde above Lanark. This is strongly advocated, as giving the nearest communication from both Edinburgh and Glasgow to London, as well as the west of England, with the advantage of accomplishing this for the greatest part of the way by only one line. This line is reported as the best by Mr. Locke; and it may be worthy of remark, that it appears to have been by this line, and also from a similar point of divergence, that the Roman armies marched from England to both the east and west of Scotland; and from near the same Roman station diverges the great Parliamentary road executed by the late Mr. Telford, under the Government Commissioners for improving the communication between England and Stirling, or the north of Scotland.

4. The westmost line, from Carlisle, by Dumfries, Sanquhar, and Ayrshire, to Glasgow. This is held out to be the best communication from Glasgow to all England, by the report of Mr. Miller, engineer.

The line to Edinburgh from Symington, running on the north of the Pentland range, is considered a much easier line, and through a much more productive district, than the one previously surveyed to Edinburgh, by Linnton, on the south of the Pentlands, but the point of divergence, we believe, commands both sides of that range, as well as both sides of the Clyde. Sir Frederick, we have also reason to understand, was satisfied with the field plans submitted to him by the gentlemen interested in the eastern line, and was surprised, after the long period elapsing since his appointment, that neither of the Northside nor the Annandale and Clydesdale lines had been sufficiently mapped or delineated, and this circumstance may perhaps account for the renowned decision in favour of the east line.

STATISTICS OF BRITISH AND FOREIGN METALS.

The following tabular statements are compiled from the "Annual Sheet for 1840," furnished by Mr. J. Richards, of George-yard, Lombard-street, and referred to in the leading article of this day's Journal:—
Statement of British and Foreign Metals Exported from London and Liverpool, from 1st January to 31st December, 1840.

	1839.	1840.	Increase.	Decrease.
Iron in bars, hoops, &c., tons.	112,559	167,367	54,808	—
Steel	2,738	1,994	—	744
Copper in cakes, &c.	3,253	3,434	181	—
Copper in sheets and nails	6,253	6,181	—	72
Tin in blocks and bars	2,351	1,679	—	1,672
Tin plates	197,981	191,216	—	6,765
Lead in pigs, sheets, &c., tons.	9,378	9,721	343	—
Spelter	3,391	3,471	80	—
Quicksilver	2,425,191	2,365,839	—	59,352

The following statement of exports of British and foreign metals, with the increase or decrease in the past year, compared with that of 1839, distinguishing those places where such increase or decrease has arisen, will, in some measure, afford the means of arriving at correct conclusions, of which the general table is not capable:—

London and Liverpool Exports.

	1839.	1840.	Increase.	Decrease.
Prussia	806	1615	789	—
Netherlands	28 0	1312	1284	—
France	3154	1338	—	1816
Spain	698	1225	527	—
Trieste	1763	3044	1281	—
Greece, Turkey, &c.	2129	2096	—	33
Barbary and Coast of Africa	1218	1258	40	—
Malta	176	1122	946	—
Cape of Good Hope	1161	752	—	409
Madras and Calcutta	7877	18715	10838	—
Bombay	5442	10613	5171	—
China	806	1137	331	—
Mauritius, &c.	2198	2474	276	—
New South Wales	2147	4821	2674	—
United States	49601	24269	—	25332
British West Indies	1330	1945	615	—
Brazil	1851	2474	623	—
Buenos Ayres	628	1274	646	—

Note.—There has been but slight variation in foreign iron, except Madras and Calcutta, where the increase is 988 tons, and China 331 tons; the decrease in the United States being 1183 tons.

TIN PLATES.

	1839.	1840.	Increase.	Decrease.
Prussia	1375	3976	2599	—
Netherlands	8038	8874	836	—
Spain	1757	3234	1477	—
Portugal, &c.	4249	2 98	—	1653
Gibraltar	24 5	3178	723	—
Sardinia, &c.	7967	1068	—	2669
Naples	7 9	2199	1620	—
Trieste	3208	1818	—	3350
Greece, Turkey, &c.	3115	3802	687	—
Madras and Calcutta	3662	44 3	—	771
China	1720	150	—	1570
Mauritius, &c.	1395	2643	1348	—
New South Wales	2196	2831	635	—
British N. American Colonies	7591	7999	408	—
United States	125747	118519	—	7228
Buenos Ayres	808	1311	503	—
Chili and Peru	2598	1416	—	1180

LEAD (in blocks and bars).

	1839.	1840.	Increase.	Decrease.
Russia	1839	249	715	—
Hans Town, &c.	1840	47	355	—
Netherlands	1840	128	181	—
France	1840	26	43	—
Portugal, &c.	1840	292	316	—
Gibraltar	1840	2 7	248	—
Sardinia, &c.	1840	134	262	—
Naples	1840	31	319	—
Trieste	1840	7	418	—
Greece, Turkey, &c.	1840	256	267	—
Madras and Calcutta	1840	35	189	—
China	1840	52	213	—
Mauritius, &c.	1840	24	162	—
New South Wales	1840	215	308	—
United States	1840	108	181	—

SPELTER.

	1839.	1840.	Increase.	Decrease.
France	1663	295	—	1368
Madras and Calcutta	1169	2923	854	—
Bombay	309	18	—	291
United States	29	275	246	—
Coastwise	493	124	—	369

QUICKSILVER.

	1839.	1840.	Increase.	Decrease.
Russia	149,809	167,200	17,391	—
Denmark	—	4,000	4,000	—
Hans Town	54,550	174,460	69,910	—
Netherlands	19, 98	96,020	76,020	—
France	32,86 0	198, 08	165,220	—
Portugal	46,150	—	—	46,150
Sardinia	15,300	3, 00	—	12,300
Madras and Calcutta	185, 30	18, 309	—	78,194
Bombay	48,881	—	—	48,881
New South Wales	900	7,000	7,000	—
British N. Amer. Colonies	3 0	6,750	6,750	—
United States	173,219	114,900	—	58,319
British West Indies	100	4,700	4,700	—
Brazil	900	4,700	4,700	—
Meico	331,000	175,275	—	155,725
Colombia	—	4,535	4,535	—
Chili and Peru	899,241	629,404	—	269,837

Statement of Duty paid on Foreign Metals for Home Consumption, at London, Liverpool, Hull, and Bristol, from the 1st January to 31st December, 1840.

	1839.	1840.	Increase.	Decrease.
Iron	17,381	18,516	1,135	—
Steel	171	18	—	153
Copper	171	18	—	153
Tin	2	17	15	—
Lead	85	12	—	73
Spelter	3,395	4,700	1,305	—
Quicksilver	2,425,191	2,365,839	—	59,352

Statement of Stocks of Foreign Metals.

	1839-4.	1840-1.	Increase.	Decrease.
Iron	3,206	4,500	1,294	—
Steel	100	100	—	—
Copper	1,230	300	—	930
Tin	119	145	26	—
Lead	250	300	50	—
Spelter	2,733	1,800	—	933
Quicksilver	2,425,191	2,365,839	—	59,352

Prices of British and Foreign Metals.

	Highest	Lowest	Average	Present
IRON—Pigs, No. 1	5 15 0	4 15 0	5 0 0	5 0 0
Do. No. 2	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 3	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 4	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 5	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 6	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 7	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 8	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 9	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 10	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 11	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 12	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 13	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 14	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 15	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 16	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 17	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 18	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 19	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 20	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 21	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 22	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 23	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 24	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 25	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 26	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 27	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 28	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 29	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 30	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 31	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 32	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 33	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 34	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 35	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 36	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 37	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 38	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 39	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 40	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 41	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 42	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 43	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 44	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 45	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 46	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 47	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 48	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 49	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 50	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 51	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 52	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 53	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 54	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 55	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 56	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 57	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 58	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 59	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 60	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 61	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 62	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 63	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 64	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 65	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 66	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 67	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 68	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 69	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 70	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 71	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 72	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 73	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 74	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 75	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 76	5 10 0	4 10 0	5 0 0	5 0 0
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Do. No. 78	5 10 0	4 10 0	5 0 0	5 0 0
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Do. No. 80	5 10 0	4 10 0	5 0 0	5 0 0
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Do. No. 89	5 10 0	4 10 0	5 0 0	5 0 0
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Do. No. 91	5 10 0	4 10 0	5 0 0	5 0 0
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Do. No. 96	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 97	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 98	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 99	5 10 0	4 10 0	5 0 0	5 0 0
Do. No. 100	5 10 0	4 10 0	5 0 0	5 0 0

ORIGINAL CORRESPONDENCE.

ON MINE SURVEYING.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—I have been waiting for the fulfilment of the pledge of Mr. Phillips, of Tuckingmill, who, in your paper last month, engaged to prove that the mode of dialling commonly adopted in this county, which I explained and condemned, is proper and perfect. I presume that this gentleman's practical mining friends have, in the interim, convinced him of his error, and succeeded in persuading him not to expose himself before the public any further in this matter, and it is so far to his credit that he has had prudence enough tacitly to acknowledge his fault, by withdrawing from the contest. Yet, I confess, I think something more than this is due to the public, and it certainly behoves him (as a teacher of polite behaviour as well as science) to come forward and speedily declare his mistake, and not think to justify himself in quitting the field in this unceremonious manner, after the unqualified pledge recorded against him in the Mining Journal.

I intended, if this gentleman had come forward, to have coupled him and my Lancashire correspondent, "X," who also appeared last month, as one pair in the same report; but as it seems in Mr. Phillips's back a run has taken place, and he has buried himself under his own *atle*, we shall consider his *pitca* as given up altogether. I cannot imagine what could induce your correspondent, "X," who calls himself a colliery manager, to suppose that I included coal mines or coal captains in my letters on mine surveying. Surely, it is most evident that the whole relates to metallic mining, and the scene is distinctly laid in Cornwall. I can assure your correspondent that I have never seen a coal mine, except in Belgium, and consequently know nothing practically of the English mode of conducting them (just as little, perhaps, as he seems to know about copper, tin, lead, or silver mining), and possibly I should never have known but what the surveying department of the British collieries was conducted in the most able manner, had not this writer, in the self-confident display of his methods of proceeding, convinced me that it is (at least so far as he is concerned) very wide of the true mark, and by no means the most excellent way.

You can bear witness, Mr. Editor, that I never write in public under a fictitious name, and I certainly have a great dislike to anonymous writing. I believe all candid men will allow that it is both unfair and dishonourable for any writer to attempt to come in disguise against an open correspondent; there may be a plausible pretext, but I am persuaded no justifiable motive can exist for such unmanly conduct. I shall take as hasty a review of this unknown writer's letter as possible, for it is only necessary to bring one part of it in contact with another and an annihilating collision will at once take place. In his introduction he makes a dead attack on such of his brother managers as do not adopt his plans, and yet, forsooth, he is pretending to defend them against an imaginary censure of mine! But now for his consistency. "Perhaps Mr. Hudge will oblige us by saying where a false survey has thrown away thousands of pounds;" answered point blank by "X," himself, as follows:—"It cannot be denied that, for want of surveys, &c., in bygone days, thousands have

SAFETY LAMP—EXPLOSIONS IN COLLIERIES.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—I observe a notice in the *Mining Journal* of last week of an improvement in the Davy Safety Lamp. Allow me to communicate, through the medium of your columns, a plan for giving increased light from the Davy lamp, which, although it might be dangerous for the common use of workmen, from its liability to accidents from breakage, might be found useful to viewers and overmen in making their surveys. It is to have a double glass cylinder to surround the light, having a space of about a quarter of an inch to be filled with water. The glass cylinder to be fitted at top and bottom into brass rims, covered with wire gauze, thus to form a glass case for the light, having a current of air entering through wire gauze at bottom, and passing off at top also through wire gauze. An aperture to be left in the brass rim at top into the space between the outer and inner glass cylinders, through which the water is to be introduced, and through which the vapour from the water, when it becomes heated, may escape. The bottom rim to consist of a screw, by which the lamp may be introduced and removed. By this contrivance a strong light would be obtained—the glass protected from too great a heat—and a partial safeguard against accident, as the outer cylinder might be broken while the inner one was preserved. Trusting some of your intelligent and practical readers may turn these hints to good account,

I am, Sir, your obedient servant,

Llanelli, Jan. 12.

GOLRENI.

FREE MINERS' SMELTING ESTABLISHMENT.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—I am really at a loss to discover the source of satisfaction expressed in your paper of the 2d inst., at the acquisition, by the "Miners' Smelting Company," of the charter granted in 1691 to the "Governor and Company of Copper Miners in England," because, if the only object of the new company be to smelt copper for the miners, they want no charter. Why, therefore, begin by burdening the new establishment with a premium of 23,000*l.*, for what is not only unnecessary, but absolutely useless.

The ostensible reason for forming the company is to protect the miners, by destroying what is said to be a monopoly, in the hands of some half dozen influential copper smelters, who, it is supposed, buy the ores at their own prices, to the prejudice of the producers. Grant this to be the fact for a moment—still, no one at all acquainted with the business will deny, that, to a certain extent, there must be competition, because we see constantly that A will give more—by 20*s.* per ton, sometimes—for a parcel of ores than B. Now, what is the system to be pursued by the new company? They are to receive the ores, to advance money on them, and pay the producers the balance, less a certain commission, when the copper is sold. All this sounds very well, but, in the working of the system, a very wide door is to be opened for profit to the company, and loss to the miners. When the ores are delivered, and the advances made, there is to be something like an assay. This assay will be fixed arbitrarily, and taken always at the minimum, so that the producer is at once to be deprived of all benefit arising from competition, and be given over to a much worse species of monopoly than he could possibly have to submit to under the present method of disposing of his ores, with the additional disadvantage of paying for it. But, were this even not the case, still, where is the necessity of a charter, at a cost of 23,000*l.*? The English Copper Company has been remodelled within the last two years—every attempt made to attract capital to it—but failed. The charter cost the company nothing, and, notwithstanding all, the dividends have not been very large, nor has the property much improved. The shares were at a heavy discount, till the new Miners' Smelting Company discovered that the charter is a very valuable document, and they then rise to a handsome premium.

Let those highly respectable parties who are going to become governor, deputy-governor, and council of administration, look well before they put down the immense sums of money which will be required, and take care that it be not applied to purposes quite foreign to the professed object in view. Let them see that their capital is not to be invested in unprofitable chemical works, tin works, tin-plate works, and charters, for which not a buyer could be found, until the notable idea occurred, that a combination to establish one monopoly, to overthrow another, was a very lucrative trade. The miners will be worse off than before—those who bring in capital will lose it—and the only parties benefited, those who find purchasers for their hitherto unsaleable brickwall, machinery, and parchment.

I am, Sir, your obedient servant,

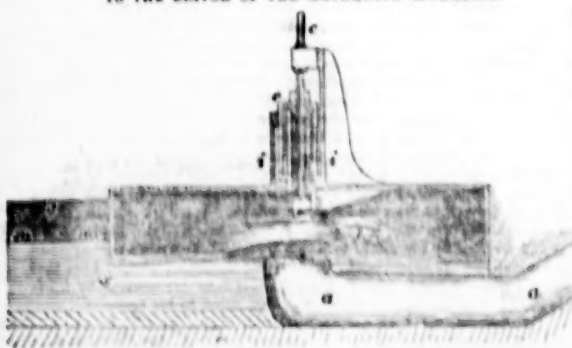
London, Jan. 11.

AN INNOVATOR, AND NO HUMBUG.

[Our correspondent must be aware of the importance of a "Charter," which limits responsibility. The assay is not proposed to be fixed arbitrarily, as the produce of the ore, but which, we presume, will at all times be fixed to the satisfaction of the miner, who, in fact, by the constitution of the company, has no assayer, smelter, and merchant. The accounts are open to him; there is no humbug," although there is innovation, and our conviction is, that, in the acquisition of the "Charter," the Miners' Company have placed themselves in a desirable position, whatever may be the cost, inasmuch that capitalists naturally would withhold their aid, where more than individual responsibility is incurred.]

IMPROVEMENT IN MESSRS. WHITELAW AND STIRBATH'S WATER WHEEL.*

TO THE EDITOR OF THE MECHANICS' MAGAZINE.



SIR,—The accompanying drawing shows a plan, which, with the assistance of Mr. George Whitelaw, I have invented for keeping the new patent water-mill out of tail water. *a* is the main pipe, *b* & *c* are the arms of the machine, and *e* is the top of its shaft. The arms work inside of an air vessel *f*, which is fixed down to a building, and is covered on the top, but has no bottom. The shaft passes freely through a hollow cylinder, fixed above an opening in the top of *f*, and there is another hollow cylinder *i*, fixed also above the top of *f*, and so large in diameter inside as to leave room for a third cylindrical part *e*, which is fixed upon the upright shaft to revolve easily in the space left between the other two cylinders. The top of *f* forms a bottom to the space which is between the two cylindrical parts first named, and *e* is fixed upon the shaft in such a manner that the joining will be air tight. An inspection of the drawing will make the arrangement, &c., of the cylindrical parts intelligible; *g* is one side of the tail race; *s* is the opening through which the water escapes from *f* into the tail race.

Suppose, now, the space into which the cylinder *e* works sufficiently filled with water to form an hydraulic joint of the kind very commonly used in gas works; then, if the machine is set in motion, the air, which will in some instances be disengaged from the water, will remain in the vessel *f*, and press down the surface of the water in it to the level *a*, or even lower. In this way the arms of the machine, although on a level below that of the surface *m*, of the water in the tail-race, will work clear of the tail-water.

It may be found necessary to use a small pump to force air into *f*, in order to lower the surface of the water. By running a quantity of water from the main pipe into the air vessel through an arrangement of pipes similar to the water-blowing machine, air will be carried into *f*. The space within which the cylinder *e* works may be supplied with water by a small pipe leading from *e*.

A water mill, composed of two round plates, the one forming the top the other the bottom of the passages for the water, with plates on edge and

properly bent, running between them from the centre outwards, so as to make the space between the round plates all into arms, will work very well in tail-water. If a ring, projecting downwards, is fixed to the under plates, then the bottom of the machine will rub on a film of air, instead of on water, and thus the friction will be diminished. This plan may be used instead of the one herein described, in certain cases.

I am, Sir, your obedient servant,

Glasgow.

JAMES WHITELAW.

ON ASSAYING COPPER BY ELECTRO-CHEMICAL ACTION.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—I have no wish to detract from any credit Mr. Byers or Mr. Martyn J. Roberts may be thought to deserve regarding the analysis of ores by galvanism, but I beg permission to state, that no claim to originality can be sustained by either of them, the subject having been amply discussed throughout the five volumes of M. Becquerel's *Traité de l'Electricité et du Magnétisme*, and especially in the fourteenth chapter of the third volume, which was published in the year 1835. I regret that those gentlemen, if acquainted with this work, have not thought fit to acknowledge the obligation, and to name the originator of the proposition.

I am, Sir, your faithful humble servant,

January 18.

H.

ON BORING AND BLASTING.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—Your Plymouth correspondent, so far from descending to unworthy personalities, has treated me with that respect which is due from one man to another, * * * I trust he will not deem me disrespectful if I opine that he has mistaken a side view of my worthless conception for the peg of a top, which he styles "a sharp-pointed bit." It is mortifying to one's pride to "conceive three times and bring forth nothing." A mental cripple, however, is, perhaps, preferable to a barren brain—men, like mothers, love their lane, and, when they sit as judges on their own cases, generally decide, or rather pronounce, judgment in their own favour. New lights set "practical" men a blinking in this dull mine of darkness, dread where we poor pill-gracks are deluded by keenly gossans. Your correspondent's remarks seem very good, and I am obliged for the trouble he has taken to "challenge" his dull scholar, but we will not torment him with the idea that he has "knocked three times, and found nobody at home." Is the changing of borers such an Herculean effort? It may be to those who have used but one sort, and that "the best."

It is painful to some men to be made the "focus of so many eyes." How modest and retiring are anonymous scribes, who too often sport with other men's names, whilst they conceal their own. I may be pardoned, as "ignorance is always presumptuous." It is well that the "great unknown" is not, like myself, anything but "a practical miner"—Alas! Alas!

"One science only will one human genius fit,
No vast is art, so narrow human wit."

We men of grass may, however, sometimes take a peep a-down the darkest depths without pretending to "see further into a millstone than the man that picks it." To suggest an improvement in another man's business seems like interfering between man and wife. But in a world like ours

"Who shall decide when doctors disagree?"
The single eye of a pure intention would look a "practical miner" in the face, if he had his vision up.

"O wad some friend the gifle gie us,
To see ourselves as others see us."

If my mere theories but draw out our practical master spirits, or "men in buckram suits," to beam light midst "darkness visible" upon the glancing eye of mind, our speculations will not be altogether inutile. Of too many it may still be said that—

"Sullen, like lamps in sepulchres, their shine
Enlightens but themselves."

"He who never doubted, never believed" that we are not at the acme of perfection, though the tools generally used may be "the best"—that is to say, the best yet discovered or generally known. But your columns are too valuable to be occupied with gladiatorial controversy, even after "a challenge!" My invention may still be useful for large holes, and the corners of the borers be an inch or more apart, whilst attached to a short solid cylinder of the circumference of the hole as a guide, the bar to be only large enough to bear the hammering. The central part of the stone within the cylindrical hole, or ring, to be broken with a wedge-pointed bar, as I shall show in my next, having determined to freely communicate whatever occurs to a thoughtful spirit. "How great effects from trivial causes spring," when, but for a hole, the mineral deposits of ages were unseen by man, unless they were upheaved by the disembowelling throes of "the great globe itself."

I remain, Sir, your's, &c.,

Penzance, Jan. 9.

A. T. J. MARTIN.

ACCIDENTS IN MINES.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—Being a constant reader of your valuable paper, I have taken some interest in the various articles appearing in it upon a subject of great importance—viz., the accidents which too frequently occur in ascending and descending the shafts of mines. Your suggestion of the use of wire rope is unquestionably good, but as it has occurred to me that many accidents take place from other causes than besides the breaking of the rope, I take the liberty of communicating some considerations of my own on the subject. I am not a practical man, there may, therefore, be some insurmountable practical difficulty in adopting the plan I propose, although I ought not to say I propose a plan, but merely offer a suggestion. After being upon the Pneumatic Railway, near Shepherd's Bush, during last autumn, it seemed to me that the principle might be applied to raising people and materials up the shafts of mines by having a platform connected with four tubes, one at each of the four opposite sides of the shaft, to be raised by exhausting the air from the tubes, and lowered by a regulated admission of air into the tubes, the platform descending by its own gravity. To prevent the platform interfering with the ventilation, it could be made of open iron grating. I remember hearing of an accident near this place, when some half a dozen of men and boys were killed by being run up over one of the pulleys at the top of the shaft of a colliery; and I know that accidents have frequently happened in the north of England by the ascending and descending cages coming in contact, and that boys being drowney have stumbled back down the shaft after coming up. If the plan I propose could be put into practice, it would prove a safeguard against all such casualties.

I remain, Sir, your obedient servant.

Llanelli, Jan. 13.

AWYR.

SUBTERRANEAN SURVEYING AND MAGNETIC VARIATION.

FROM A CORRESPONDENT OF THE RAILWAY MAGAZINE.

SIR,—Subterranean surveying is, as you, doubtless, are well aware, universally performed with the circumferentor. It appears extraordinary in these days of the general diffusion of useful knowledge, that such a vast amount of human life, and of valuable property, should be left dependent on so imperfect an instrument. I hope you and I may both live to see the theodolite substituted for the circumferentor, because it is not to be expected that men, who so seldom use their instrument on the surface of the earth, will exercise the care and caution necessary to insure even an approximation to accuracy with the circumferentor.

Mr. Fenwick, Colliery Viewer and Surveyor of Mines, in his elaborate *Treatise on Subterranean Surveying, and the Magnetic Variation of the Needle*, gives the variation at London, and not at Newcastle, where his work was published, from which it may be fairly inferred that the variation at Newcastle was not known. It may, therefore, safely be assumed, that the generality, at all events, of mining surveyors, do not duly test their needles. They ought to be tested once, at least, in every year. It is not unusual to lay down a line on a plan, and call it a "True North" line; but this, at best, is a line laid down to the angle of the recorded variation of the day, which purports to be the ascertained variation at London, and not, as it ought to be, the variation, at the time and place, of the identical needle with which the survey has been made.

Now the workings of coal mines, particularly, are, in general, spread over extensive areas, and continue in operation for many years, during which time not only will different surveyors, and different needles be employed, but the variation will undergo material changes. Thus in the year 1376 the variation at London was 11 deg. 15 min. east; in 1662 it coincided with the true meridian; in 1700 it was 9 deg. 40 min. west; in 1804 it was 24 deg. 08 min. west; and in 1815 it was 24 deg. 18 min.; since which time no material change has occurred; nevertheless, it will

be perceived that, in less than forty years, in one instance—viz., from 1662 to 1700, the variation varied from itself 9 deg. 40 min. and this may reasonably be expected to occur again; for, although within the last forty years very little change of variation has taken place, yet the laws by which it is governed are altogether unknown to us.

A very short time since a man was suffocated in a coal-pit, owing to the pitmen in an adjoining mine having purposely kindled fires, so that the draught carried the smoke into the mine in which the sufferers (for there were several) were at work. Here, then, was a disputed boundary question, which had, no doubt, arisen in consequence of the inaccuracy of the surveys. The surface survey having, most probably, been made at one time, and under one degree of variation of the compass; and the subterranean survey made at other times, of course, as the workings progressed. Such disputes must constantly occur, and be productive of vexatious and expensive lawsuits, as well as the loss of life.

I would take the liberty, therefore, of suggesting that, as long as the circumferentor is continued to be used, the utmost care should be taken to keep it in good working order; and, as the ascertaining of the magnetic variation requires more care, time, and trouble, than mining surveyors choose to bestow upon it, that the bearing of any other line may be taken, in lieu of it, laid down, and properly described on the plan. Thus let the bearing of the line connecting two permanent objects, as two distant pit mouths, or the main pit mouth and the parish church spire, be selected; and let a large stone, properly marked, be sunk in such line produced; over which stone let the circumferentor be set up, and the bearing of the line be carefully taken and recorded on the plan, as a true meridian line. Then, if some such precaution has not been already taken, a complete new survey of the whole of the main lines of levels should be made, and the magnetic bearing of the new invariable meridian, or test line, correctly laid down, with the amount of its variation, or difference, from the magnetic meridian, recorded in figures on a new working plan.

When additions to the plan are required, the magnetic bearing of the test line should be observed, with the needle about to be used, and if such bearing does not coincide with that recorded on the plan, the bearings of the lines to be added, should be reduced to bearings from the fixed meridian, by the usual rules, and protracted accordingly.

If these precautions were observed, the annual variation of the magnetic meridian would vitiate the plan, however great the length of time during which the workings might be in progress. The surveyor would, however, still have to contend with diurnal variation, which sometimes amounts to twenty minutes in one day, with local attraction, the effects of which are incalculable among tram-plates, waggons, tools, &c., and with, though last not least, the inherent imperfections of the instrument.

REVIEWS.

A Practical Treatise on the Law of Mines and Minerals. By WILLIAM BAINBRIDGE, Esq., Barrister-at-Law. Henry Butterworth, London.

The title of this work at once is significant of its contents, and such as to induce the adventurer to be anxious to acquire—and, we may add, the lawyer to advance a fee of attendance in its purchase, which may not only possess him of much useful and valuable information in his practice, but save many pounds in its acquisition. Mr. Bainbridge, in his introduction to the work under notice, very correctly observes—

"The continued and increasing ardour with which mining operations are carried on in this country, the magnitude of the capital embarked in them, and the general importance of the subject, have not failed to produce an abundant harvest of litigation, the costs of which, indeed, have in some late instances, almost rivalled the profits of the subjects of dispute."

This is too true, and hence we hail with pleasure the appearance of a work calculated to dispense some of those clouds which, unfortunately, pervade not only the minds of adventurers but of professional men, whose knowledge on the subjects on which they are consulted too frequently is acquired only by practice, and that at the cost of their clients. Mr. Bainbridge observes in his preface, to which we have made reference, that—

"It may justly excite surprise that no legal work should have hitherto appeared, which should profess to examine and discuss the important and interesting questions which have arisen on the subject of mines, and to reduce them to the form of a regular treatise. It is the object, therefore, of the following pages to supply this desideratum. The sources from which this exposition has been drawn are sufficiently various and scattered. The subject, has, indeed, received so little attention, that there does not even exist a bare epitome of the law respecting it, in the general and elaborate books of legal reference. It has been the pleasing occupation of the author to collect and examine the requisite materials for such a work. His searches have indeed sometimes resembled, both in their character and result, those connected with the occupations of a which he designed to treat, and, like the miner, he has often been compelled to traverse the labyrinth of darkness before emerging to the light of day."

Before proceeding to notice the contents of the work, which are highly creditable to the talents and industry of the author, as furnishing information which could alone be acquired by an intimate connection with the mining districts, as well as a legal knowledge of the several points discussed, we cannot but make a further quotation from his introductory pages:—

"It is often a subject of much regret that the important speculations of mining adventures should be conducted on such loose and unsatisfactory local arrangements as are too often found to exist. An adventurer is often productive of no successful result, or so slow and gradual in the development of its wealth, that the precautions of law are very frequently either postponed or wholly neglected. In partnership transactions this is a common occurrence, and deeds of co-partnership, even when completed, are often very deficient. The perusal of the following pages will abundantly prove the necessity for prudence and foresight in all such arrangements."

The first chapter treats on "the general nature of mines, quarries, and minerals," and is given in a terse and comprehensive manner, with authorities, which throughout the entire work forms its great value, as being the legal dicta, while the object of the author appears to have been, to render the substance in the most condensed form—the chapter consisting of barely two pages of matter, might have been well consulted, and, doubtless, would have had its effect in a case which has been twice heard in Ireland on Mr. Dillon Croker's property, wherein the Kenmare Mining Association are prosecuting their works, and although some hundred tons of copper ores have been raised and sold at public ticketing, yet it has been found difficult to define what constitutes a mine.

We can excuse our Irish friends for blunders in the absence of printed evidence, for counsel only bother each other as the briefs bother them—being called upon to discuss and argue on subjects which they do not understand, while the solicitors, with some few, and only a few, exceptions, are ignorant "quite entirely" of the case which they have drawn. Indeed, we fear that lawyers, if they possess any mining knowledge—and few there are who do—have sufficient legal acumen to determine the course they shall pursue; that is—in many instances, taking the counsel or instructions of their clients, or depending for rests on the ignorance of the court sitting parties. Our experience has satisfied us that mining and minerals are not understood by lawyers; it would be invidious to name exceptions, which we feel might be made, both as regards solicitors, the barrister in chambers, and counsel at the bar; but, at most, at least, be admitted, that too generally a want of information prevails, and which is, in a great measure, met by the publication of the present work—one which must be popular, and ought (as indeed it will force itself), from its utility, to be in the office of every solicitor, while its usefulness to the capitalist and mine adventurer will be acknowledged even by a brief review of its contents. As the work is one of too much importance and interest to be hastily noticed, our object, on the present occasion, is rather to note its publication, so that others may acquire the means of judging of its merit as well as ourselves, by the acquisition of the work, and, therefore, in briefly noting the several subjects on which the author treats, we must, for this week, close our notice.

We have already observed, that the general nature of mines, quarries, and minerals, form the first chapter, with reference to the several cases wherein opinions have been given, as illustrative of the opinions of the author.

The next chapter has reference to "the right of property in minerals," which is ably discussed, at considerable length; the two immediate following chapters being "on Royal mines," and "on the right to work mines," the latter point is well considered, and the authorities quoted (which, unfortunately, almost requires a barrister's library for reference) are at least sufficient, if the number of witnesses be taken into consideration. We next arrive at the consideration of the modes, under various circumstances, of "the transfer of mines," which occupies some space, and may be consulted with advantage. The question of license, or liberty to work mines, as compared with a lease, and the application of "the statute of frauds," are well worthy the attention of the adventurer, as, indeed, is the whole of this portion of the work. Proceeding further, we find the subject of leases and licenses very fully entered into, from which we purpose, on an early occasion, making some extracts. The right in grant leases also occupies some space, but as this is purely a legal matter, we refer it to the consideration of gentlemen learned in the law, and from which Mr. Bainbridge, with a kind desire—not hardly with a natural feeling, as being "one of the class"—would seem desirous of protecting the adventurer. We now approach a subject of the first importance—that of the question of partnerships in mines—and without offering any observation on the remarks and opinions put forward, founded, as we have every reason to believe, on careful consideration of the cases which have come under the notice of the author, we do most earnestly request all those

embarked in mining undertakings, to consult this portion of the work, which, in fact, forms a considerable feature, as, in like manner, it occupies space, in the volume. The serious questions which have been instituted in our courts of law and equity—the many (to us) absurd or extravagant decrees arrived at, from sheer ignorance of the subject submitted to judge, counsel, and jury—render it highly important to acquire a knowledge of those cases which have come under notice of our courts, while, to the adventurers, it is desirable to remove doubts and apprehensions where such exist, as we know to be the case with many capitalists—and, at the same time, to give tone and confidence to parties embarking in mining enterprise. We must hastily pass over the other matters treated upon in the work, intending, as we do, not only to peruse it carefully, with the view of reviewing it in a manner which it merits, but also to acquire, and store away, that information which is to be gathered; we therefore may briefly state, that all matters which may be fairly comprehended under the title of the volume, will be found included in its contents, while the number of cases cited, and to which immediate reference is made, consist of upwards of between 600 and 900, which, in consulting alone, must be alone a work of immense labour.

The Railways of Great Britain and Ireland, practically described and illustrated. By FRANCIS WHISHAW, Civil Engineer. 500 pages, with Appendix and plates. Weale, Holborn.

This work, which is most unique and perfect in the comprehensive view it affords, is not only valuable to the railway capitalist, to whom it is properly dedicated, but to the railway engineer, and to all interested, whether direct or otherwise, with the subject on which it treats. Mr. Whishaw has, in this work, afforded evidence of application and practical knowledge, which will be admitted, by all those who labour in the field in which the exercise of his talents are employed, while with the many lines of railways, directors, and engineers, which are fairly and freely canvassed in his pages, and appears to us to have been most happy, affording detailed information, and avoiding any observation which might be construed as of a personal nature, or as detracting from the merits of the undertaking. The work is, perhaps, best described in the author's own words in the introduction, and, therefore, we adopt them, fully agreeing with him that—

"Time, to those blessed with the advantages of railways, is, at it were, of thrice its former value; while money, considered relatively, is already increased in a two-fold ratio; and the day is not far distant when the means of railway travelling—looking to the increasing facilities and improvements which are constantly taking place—will be yet much more within the reach of the humblest classes of the people."

The advantages to be derived from the establishment of railway communication, we feel, with the author, have not yet been fully developed, nor are they, perhaps, appreciated—to the merchant and man of business is afforded the means of saving time and money, while business is facilitated, and thus, throughout all our various stations in life, a saving effected—to the mechanic, and even the labourer, the advantages are also derived of ready transit to distant points where his services are required, with an advance upon his former earnings, or, perhaps, employment, where before he was idle—thus equalising, in a great degree, the value of labour.

We may here quote from the work under review the following paragraph treating on the Ayr and Forfar Railway, and we need hardly observe, that our friends in the north have a pretty shrewd guess as to the side on which economy lies—

"We were much surprised, when examining this line in September last, to see a party of reapers travelling by the third-class railway carriages in preference to walking to their work, and we found on inquiry that this was by no means an isolated case, but of every day occurrence. In fact, with the low fares adopted on this line, it is more economical for the poor man to ride than to walk."

Having referred to this line, it may not be amiss further to note Mr. Whishaw's further observations with reference thereto—

"Among the railways of Scotland already opened to the public, not one seems to have produced such extraordinary results as the short line between Ayr and Forfar. It is a fact worth recording, that the passenger traffic between these two places, antecedent to the opening of this railway, was so insignificant in amount as not to be sufficient for the support of a single public conveyance. The case is now very different, not fewer than four trains pass daily in each direction between the terminal stations. This statement, however, would not of itself be sufficient to show the self-sufficiency of railway traffic, as exhibited so strikingly in this line, without also adding the number of passengers conveyed in a given time. Nearly 50,000 passengers, on an average, travel daily on this line for ten weeks ending the 10th August, 1876, which is at the rate of about 130,000 per annum, exclusive of Sundays, on which days it is well known that public conveyances of every description, save only the mails, are strictly prohibited from travelling throughout Scotland. In the ten weeks above alluded to, not less than 127 tons of merchandise were, on an average, conveyed on this line daily, being at the rate of nearly 4,000 tons per annum; and this at a period when the railway had been opened but a very short time."

These remarks alone, we feel, will be esteemed as sufficient evidence of the advantages of railway communication, and must have their effect with government as well as with capitalists in the construction of railways—heretofore so shamefully neglected in the Sister Isle. Mr. Whishaw observes at some length on the government toll or toll tax, which must be admitted as not only imperfect in conception, but unjust in its application. It will be seen that one eighth of a penny per mile on each passenger is chargeable on the railway by government, without reference to such passengers by first, second, or third class, and thus the lower the fares on the part of the company, the greater per centage do they pay the government; and hence, as is very fairly observed, and with good reasoning, if a railway be constructed at one-half the cost, and the fares, we will assume, be in the like ratio on any one railway, the duty paid to government is 100 per cent. more than those lines where extra cost demanding higher fares precludes the public from deriving to the full extent those benefits which are to be calculated upon, and will eventually be afforded by railways. We will allow the author here to speak for himself—

"As an apt illustration, we may suppose the first-class passenger traffic on a given railway to be equal to half of that of the second-class traffic, and that the third-class traffic is also in the same ratio with respect to the second; we may further suppose the first-class fare to be at the rate of 1d., the second-class fare at the rate of 2d., and the third-class fare at the rate of 3d. per mile respectively. By adding the amount of second-class fares, and one first and one third class fare together, we have 6d.; from which, if the government duty of one eighth of a penny per mile be deducted, there will remain 5d. for the railway company; for the carriage of four passengers over one mile of their line. But another company has constructed a railway for half the cost of the first, and has an equal share of traffic; but having expended on 7 half the amount of the first company, is enabled to carry passengers at a very much reduced rate per mile; not, however, equal to half, on account of the government tax, which remains the same as in the first case, for if the second company were to charge only half the already quoted fares, they would sustain a loss of 64 per cent., suppose the desired rate of interest on the capital expended to be the same in both cases. For instance, if the fares in the second case be taken at 1d., 2d., and 3d. respectively, the collective amount of two second-class fares, and one first and one third class fare as before, would be 4d.; from which, deducting the government duty, there would remain only 3d. for the company, or, in other words, half the receipts per mile by the higher scale of charges. But, if, on the contrary, a fixed duty, say at the rate of 1/8 per cent., on the gross amount received by the company for the carriage of passengers, were substituted for the unequally pressing toll tax, the fares might then be reduced in proportion to the diminution in cost of the original construction of the railway."

We find that a single notice of the work will not be doing it justice, and, reserving several points on which it treats, which are not only of interest to the general reader, but of importance to those embarking capital, and to the practical man, as the result of much inquiry, which could only be acquired by much application, and heavy cost, in a preliminary sense, proceed to notice its leading features. Indeed, when we state, on the authority of Mr. Whishaw, as conveyed through the pages, that sixteen months have been devoted to investigating the necessary inquiries, and acquiring information—that upwards of 7000 miles have been traversed by that gentleman in its pursuit, having "visited"—when we further state, that every particular is rendered, as regards of fifty-eight distinct and separate railway companies, giving not only an outline, but details, to which we shall hereafter more immediately refer, with a detailed account of "practical experiments, showing the ordinary working of the principal railways in the kingdom, the results of which bring to light some important facts with regard to laying out railways," added to which, the tables in the Appendix, showing the proportion of 630 locomotive engines used on British and foreign railways. These alone will insure to the work a very general circulation, and, as we are led to believe, the publication of a second edition, which would be valuable from the advancement we are daily making in this branch of engineering, without reference to the increased and increasing beneficial results arising from railway communication, which is manifested in our mercantile and other relations. Having carefully gone through the volume, consisting of 600 pages, with seventeen plates, we feel that we cannot better give an idea of the nature of the work than by narrating the principal points, to which, with reference to railway undertakings, notice is more immediately directed, and which, in every instance, may be said to be entered into with a fair spirit. We have first the introduction, or rather a general reference to the line, with the author's remarks; we next proceed to the Acts of Parliament obtained—the mode of raising money, capital, &c.—the general course of the railway, and, next, of the construction, gauge of way, description of permanent way, drainage, and fencing, the earthworks, viaducts and bridges, tunnels, stations and depôts (including the code department), description of coals purchased, passengers' carriage departments, waggons, trams, fares, passenger traffic, locomotive engines, establishment, cost of the undertaking, original estimate, annual expenditure, and revenue. To this varied and useful information is appended the Standing Orders of both Houses of Parliament relating to railway bills, as also Lord Seymour's Act, the list of names removed as the authorities consulted, and from whence information has been gathered, whether companies or individuals, consisting of 130 in number, which at once give proof of the application of the author, and the various and authentic sources of intelligence.

One of the most important subjects treated on in the volume before us (which we are given to understand will be followed by "Railway Statistics," with illustrations), but to which we have not hitherto directed attention, is the "reciprocating system" of railway communication, which combines in its application economy and security, is treated on at considerable length, and its advantages demonstrated; this, however, with other subjects deserving of notice, must necessarily form subject for a second notice, containing ourselves, on the present occasion, with the expression of our cordial approbation of the work—the care observable in its production, and the style in which it has been got up, being most highly creditable to the author, the delineator, the engraver, and the publisher. It is seldom, indeed, that a work, illustrated as the present, comes under notice, while it is gratifying to find that our continental neighbours can no longer boast of superiority as regards works of this kind, and which, to the discredit of this country, so long was the case. We propose returning to the subject treated on, more especially the "reciprocating system," in our next, and hence close our present notice thus abrupt.

RAILWAY CONFERENCE.

On Tuesday last a general meeting of railway directors and managers was held by appointment at the large room in the Queen's Hotel, Birmingham, at which were present delegates from the following companies—viz., Birmingham and Derby, Birmingham and Gloucester, Chester and Birkenhead, Eastern Counties, Great Western, Hull and Scry, Lancaster and Preston, Liverpool and Manchester, London and Croydon, London and Greenwich, London and Birmingham, London and Brighton, London and South Western, Manchester, Bolton, and Bury, Manchester and Leeds, Midland Counties, North Midland, North Union, York and North Midland. George Carr Glyn, Esq. (the chairman of the London and Birmingham Railway Company), was called to the chair; and probably no meeting was ever held where the members represented a larger amount of property. The parties present were the representatives of considerably above 50,000,000 of capital. The utmost cordiality was manifested, and the strongest desire expressed by all present to adopt every possible means of accomplishing the proposed object. Those who were most conversant with the management of railways stated their conviction that by far the greater part of the accidents which had occurred were referable to the neglect and disobedience of orders on the part of railway servants; and while some few casualties must be expected to occur in any mode of locomotion by such immense numbers of persons as are conveyed on railways, it must be to an improved state of discipline and moral responsibility on the part of the men employed on railways that the exemption from accidents must be looked for. In these sentiments every person who delivered his opinion concurred. The deliberations of the meeting lasted for several hours, during which time the regulations and signals adopted on all the principal lines were fully discussed, and the following resolutions were unanimously passed; after which the meeting broke up, with the understanding that a future conference should be convened whenever it appeared desirable.

Resolved, 1. That in consequence of the public anxiety, occasioned by the accidents which have taken place on various railways, the companies here represented, in order to profit by the combined experience of the principal lines, have deemed it expedient that a general conference should be held, for the purpose of taking into consideration the causes and circumstances of such accidents, and the means that may be desirable of more effectually guarding against their occurrence for the future.

2. That this meeting acknowledges the grave responsibility which attaches to railway directors, and the obligation under which they lie to adopt all judicious and practicable expedients for insuring the general accommodation, comfort, and safety of the passengers entrusted to their charge; that, under a strong impression of this responsibility, they have assembled on this occasion, and have pursued their deliberations at the present conference.

3. That this meeting, while it deeply regrets the accidents which have occurred, looks forward with confidence to the beneficial result of unremitting vigilance and habitual caution steadily enforced and established, as the great means of increased safety to railway conveyance; and accordingly they would deprecate any sudden or hasty legislation on the subject, being convinced that the means referred to, aided by such improved arrangement and mechanical adaptations as a more matured experience may suggest, will amply accomplish the desired object.

4. That the moral character and general fitness of engineers and firemen, as well as of policemen and other servants, in the correct performance of their duties, the public safety is involved, are so essential to the security of railway travelling that this meeting recommends to all railway companies the strictest examination into these points, and that it should be a rule more generally adopted amongst different managements, not to employ servants having worked on other lines, without authentic and satisfactory testimonials from their former employers.

5. That in case of serious neglect of duty on the part of railway servants, it is desirable more frequently to put in force the penal provisions of Lord Seymour's Act, in order that the strictest discipline may be maintained. At the same time this meeting considers it due to men, whose services are so arduous in the discharge of the requisite discipline and obedience of orders by adequate remuneration, and by suitable rewards for extraordinary exertions or long sustained good conduct.

6. That the directors at this meeting assembled have taken into their serious consideration the expediency of placing on the engine a third man as conductor or captain, in addition to the engine man and fireman usually employed; and they are of opinion that such a measure, by directing attention, dividing authority, and removing or diminishing the responsibility of the engine man, would increase rather than lessen the rate of accidents to the public.

7. That this meeting considers it desirable that there should be an uniform system of signals recognised, and applicable to all railways, and they recommend that the following rules and regulations with this view be submitted to the consideration of each railway company.

ACCIDENTS.

HEAM CASTLE COLLIERY.—This colliery, situated near Saundersfoot, Pembrokeshire, the property of Messrs. Stokes and Wilson, was, on Saturday last, the scene of a most distressing and fatal accident, by which two persons were deprived of life, and another placed in the most perilous circumstances. One of the colliers, accompanied by two boys, was preparing to ascend the pit, and had just got into the "tram" which was to take them to the surface, when another tram, full of coals, which had reached the mouth of the pit in safety, was suddenly precipitated down the shaft, and, before the unhappy men could escape, they were crushed beneath it. One of the lads was instantly killed, his brains being literally dashed out; the man lived for some time, but one of his ribs being driven in (it is supposed), caused internal hemorrhage; and, notwithstanding he had immediate medical assistance, expired in the course of the day. The skull of the other lad was dreadfully fractured, so that the brain protruded, and for some days his life was despaired of; but it is now hoped that, through the unremitting attention of Mr. Shaw, of Tenby, his ultimate recovery may be effected. The poor man has left a widow and several children. An inquest was held on the body on Wednesday last, when a verdict of "Accidental Death" was returned.—*Carmarthen Journal.*

BILSTON BROOK IRON WORKS.—On Saturday last the inhabitants of this neighbourhood were thrown into the greatest alarm by a dreadful explosion and shock, occasioned by the bursting of a boiler at the works of Mr. D. Jones, when one of the most awful sights we ever beheld was witnessed—women running to the spot crying, expecting to find husbands or children killed by the explosion, and the poor men coming from out the ruins scalded and hurt in a most dreadful manner. It was fortunate that it happened at dinner time, when a great number of the men were away, or the consequences might have been dreadful; as it was, six or seven of the men were very much scalded; one, Daniel Evans, is since dead from the injury received, and two or three more lie in a very dangerous state, with little hopes of their recovery. The works are very much injured by the accident; it is said that it will take £500, or £600, to put them in repair. The property in the neighbourhood is also much injured. There is a great variety of opinions as to the cause of the accident; by some it is said that the boiler was an old one, and not fit for use—others think it was caused by the cold water being run into the hot boiler—but we refrain from giving any opinion on the subject.

EXPLOSION OF GUNPOWDER.—A melancholy accident occurred at Kestall Vale Gunpowder Works, by the explosion of one of the principal mills, by which a man named Martin was killed on the spot; another man, who was a few yards from the mill, escaped comparatively unscathed, although he was surrounded by the falling fragments of trees, stones, &c. The concussion occasioned by the explosion, extended throughout the whole neighbourhood, and excited the greatest alarm amongst the inhabitants.—On Monday last Mr. Corleyn held an inquest at Redruth, on the body of William Gleds worthy, a lad ten years of age, who was innocently sitting in some wetted powder, when a spark ignited some dry powder which he had in his pocket, and he was so severely burnt that he did not survive.

HALLOWEEN.—On Tuesday last Richard Bennett fell into a shaft at Halloweiden, and was so severely injured that his life is despaired of.

TINTAGEL.—A lad named Masters, about seventeen years of age, while working in a stone quarry on the cliffs, in the parish of Tintagel, missed his footing in turning for some tool, and fell over a high precipice into the sea.

POWDERHOPE.—Richard Apperley, about sixty years old, died in consequence of injuries received by a quantity of earth falling upon his legs, whilst employed in a quarry at Powderhope.

DOWLS.—A dreadful accident occurred to a roll turner, employed at the Downside Works. His hand was so much drawn in between the rolls, when it was separated from the arm a little below the elbow; and had it not been for a fellow-workman getting hold of him that moment, he would undoubtedly have been drawn in altogether, and crushed to death.

CLAYTON TUNNEL.—On Wednesday afternoon a jury was impanelled at the Pougham Inn, Pymouth, near Brighton, to inquire into the circumstances connected with the death of Thomas S. Jones, aged thirty, a miner, employed in the works of the London and Brighton Railway. It appeared from the

evidence, that deceased and several other men had been at work in a tunnel, forming on this line of railway, near Clayton, when a massive piece of rock suddenly fell in, carrying with it a quantity of earth, timber, and a portion of the brick work, burying or wounding most of them. As soon as the accident was made known to Mr. Jackson (the superintendent of the works), he collected a number of the workmen for the purpose of digging out the unfortunate sufferers, but, in consequence of the apparent danger from the tottering condition of the rock and brick work, they were deterred from making any attempt to extricate them until Mr. Jackson set them the example, and in a short time the deceased and three others were got out. The deceased, however, was quite dead, and the others were so seriously injured that they were immediately conveyed to the Sussex County Hospital, where they lie without hope of recovery.

MINING NOTICES.

[Under this head we purpose collecting such paragraphs as may appear in the provincial and other Journals, having reference to discoveries and improvements in mining operations at home and abroad. It is highly necessary to observe, that we must not be considered to admit the correctness of the information conveyed, which, in too many instances, requires cautious investigation—the sanguine expectations of parties in some instances, and the want of honesty in others, throwing a degree of responsibility on a Journal in giving publicity to reports, which we do not intend taking upon ourselves.]

THE BEAM MINE.—We understand that this mine, in the parishes of St. Austell and Roche, is to be set to work immediately, by Matthew Moyle, Esq., of Chacewater, and some gentlemen of St. Austell and neighbourhood. A numerous and respectable meeting of the adventurers was held at the Queen's Head Inn, St. Austell, on Tuesday last, when it was unanimously agreed to erect an engine on that part of the sett called Good Fortune, on King's-hill, near Heanisharrow. It is well known, adds our correspondent, that Beam tin is some of the best in the county, and that upwards of 450,000lb. worth of it was sold by the late proprietors, Messrs. Rashleigh, Williams, and Co. Considering the depressed state of business in the neighbourhood, it is a very desirable object to see all classes reap the benefit of a productive mine.—*West Briton.*

COAL MINES IN SPAIN.—We find by the Spanish journals, that the rich coal mines at Sama, in the Asturias, are beginning to be worked on a large scale; and that the railway from them to the small port of Gijon affords the produce a ready entrance into the Bay of Biscay. Several shafts have been opened, and traverse eleven beds of coal, said to be equal in quality to the best Newcastle, and of an inexhaustible abundance. The railroad runs through a mountainous country, but the inclination of its planes does not exceed 5 in 100. These mines will form the groundwork of a brisk trade with Bayonne, Bordeaux, and the whole of the basin of the Garonne, where hitherto all the coal used has been drawn from England or Belgium.—*Galignani's Messenger.*

VALUABLE COAL MINES IN INDIA.—The *Overland Courier*, last received from Bombay, says:—"We understand from a good source that, at Ullimand, a place in the Portuguese settlement of Mozambique, a short distance to the south of that town, a discovery has been made of some valuable coal mines. This discovery is of great interest, not only to the Portuguese, but to the British inhabitants of India, as it will tend to insure a supply of that necessary article, in many of the contingencies of war, not only to steam-boats of the Indian Ocean, but also at Aden and in various parts of the Red Sea. The quality of the newly-discovered coal is said to be excellent. Specimens have, as we hear, already arrived in Bombay."—*Morning Herald.*—[Should the coal turn out well, and the mines easily accessible, with plenty of labour handy, this discovery may really, as said, be of the greatest importance: in extending steam navigation all over the circumjacent coasts of the ocean as well as of the rivers.]

INFLAMMABLE AIR FROM ALCOHOL.—Pelouze and Millon, by passing alcohol over anhydrous barytes, elevated to a dull red temperature, found that carbonate of barytes was formed, and carburetted hydrogen given off. This is the first instance in which this gas has been formed artificially; when formic acid is heated with an oxide it is decomposed into carbonic acid, which unites with the oxide, and into pure hydrogen. In this case, the half of the hydrogen comes from the water which has been decomposed by the carbon of the formic acid under the influence of potash. This action it occurred to the chemists mentioned, might also extend to alcohol. They passed carburetted hydrogen procured from alcohol over hydrate of barytes, and obtained hydrogen in large quantities. Naphthalene disengaged the same product. The anhydrous oxalates, when heated with barytes, afford, as is well known, carbonic oxide. By substituting hydrate of barytes, hydrogen is procured; carbonic oxide, also, under the same circumstances, affords pure hydrogen; even charcoal itself does the same. Pelouze and Millon have drawn the following conclusions:—anhydrous barytes takes up from organic substances all the carbonic acid which their elementary composition permits them to furnish; hydrate of barytes extends the decomposition farther, and tends to burn all the carbon, while the hydrogen which proceeds from the decomposition of water is disengaged in a free state.

FROM THE LONDON GAZETTE.

Tuesday, January 19.

BANKRUPTCY SUPPLEMENT.

Joseph Taylor, Wednesbury, Staffordshire, iron merchant.

John Cockhill, Almondsbury, Yorkshire, sheepkeeper.

BANKRUPT.

E. V. Shipman, Hackney, licensed victualler. (Dimmock, Rice Lane.

H. Joseph, Soho-square, artist colourman. (Bryce, Broad street-buildings.

W. Bowles and J. C. Bowles, Golden-square, Bedford-square, upholsterers. (Kingsley.

Colehill street, Putney.

L. B. Bosc, Marshall-street, Golden-square, packer. (Fisher, Queen-st., Chesham.

H. Reed, Marquis-court, 9, York-lane, victualler. (Dimmock, Rice Lane.

A. Oppenheim and W. M. Oppenheim, Mansell-street, Goodman's-fields, timber merchants. (Michael, Red Lion-square, Holborn.

Sarah S. Leak, Holt, Norfolk, milliner. (Hills, Brunswick-place, City-road.

E. E. House, Worcester, stationer. (Clark and Cooper, Sessions-house, Old Bailey.

R. Morris, Gloucester, coachmaker. (Wilton, Raymond-buildings, Gray's Inn.

H. Marsden, Cellan, Cardiganshire, cattle dealer. (Turner and Co., Basing Lane.

R. Riley, Welwyn-street, Warwickshire, corn dealer. (Addington, Gregory, Faulkner, and Follett, Bedford-row.

J. Barlow, Birmingham, brass founder. (Rowland and Co., White Lion-court.

F. Buckle, Leeds, merchant. (Wiglesworth and Co., Gray's Inn square.

F. Perks, jun., Stourbridge, Worcestershire, hatter. (Clowes and Weale, King's Bench walk, Temple.

K. Richardson, Sunderland, merchant. (Addington and Co., Bedford-row.

J. Waddell, Birmingham, druggist. (Church, Bedford-row.

DIVIDENDS.

Feb. 9, A. J. Kopeck, Crown-court, Old Broad street, silk merchant—10, W. Col.

brock, Mill-street, Ha-aver-square, tailor—11, W. Nixon, Boston, Lincolnshire,

ironmonger—7, W. Deacon, Carnarvon, innkeeper—9, W. Farrell, Kensington,

Lancashire, cattle salesman—1, W. W. Hinkins, Bilton-in-Moors, Lancashire,

ironmonger—12, T. Green, Kilton-in-Lindsey, linen wholer, draper—C. Johnson,

Gloucester, Brigas, Lincolnshire, innkeeper—17, T. Nicholson, Kilton-in-Lindsey,

Lincolnshire, scrivener—12, J. Hiley, Calver, Lincolnshire, currier—17, J. Knock-

marwick, Southam, maker—10, D. Knibb, Liverpool, tailor—19, W. Levett, sen., and

Levett, jun., Kingston-upon-Hull, merchants—12, J. Smith, Leeds, joiner—11, W.

Triantse, South Lynn, Norfolk, builder.

CERTIFICATES to be granted, unless cause be shown to the contrary, on or

before February 9.

S. Thomas, Bristol, hotel keeper—A. Miles, Rochdale, Lancashire, dyer—D.

Hedges, Oxford, plumber—J. Bosker, Hereford, coat, Broad street, chromo-

maker—F. Langan, Regent-street, wine merchant—T. E. Smithy, New Basing-

hall-street, hatter—T. Brown and T. Brown, jun., Mansell-street, Goodman's-fields,

plumbers—J. Handolph, Bridge-street, Westminster, surgeon—C. J. Cooks, York,

brush manufacturer—G. Hopkinson, Liverpool, coach builder—J. Bacon, York,

grocer—W. Waddell, Liverpool, merchant—G. Webb, Bristol, tea dealer.

Friday, January 22.

INSOLVENT.

Jan. 22.—John Appleton, Hounslow, ironmonger.

BANKRUPT.

J. Eiley, Richey-court, Linn-street, merchant. (Tweedale and Co., Finchchurch-st.

W. H. Cooper and H. Ayre, Manchester, calico printers. (Addington, Gregory,

Faulkner, and Follett, Bedford-row.

(Linnco's Inn, Soho.

J. Young and G. Bentley, Wolverhampton, iron founders. (Clarke and Medcalf,

G. Ellis, Lane-end, Staffordshire, earthenware manufacturer. (Barlow, Stone.

R. Bainbridge, Leeds, winecrafter. (Lawless and Co., New Broad street.

J. W. Walwright, Bridge-street, Somersetshire, builder. (Addington, Gregory,

Faulkner, and Follett, Bedford-row.

W. Willis, jun., Manchester, bookbinder. (Mackintosh and Co., Kim-court, Middle

J. Winks, Sheffield, iron merchant. (James, Basinghall-street.

J. R. Berry, Cambridge, wine merchant. (Beecham, Bedford-row.

E. Tyler, Birch Hill, Staff-shire, iron master. (Michael, Red Lion-square.

R. Hoven, Kildon, Yorkshire, corn factor. (Williamson & Hill, Vernon-buildings.

DIVIDENDS.

Feb. 12, J. Hochen, Malton street, Hanover square, tailor—13, J. Moore, Old

Broad street, hatter—17, J. Gervay, Sheffield, ivory scale cutler—10, A. Miles,

Kilnbridge, dyer—17, C. Walbank, Birmingham, metal dealer—17, G. Wood, Long-

strath, Gloucestershire, wharfinger—18, F. Beckingale, Bridgeton, grocer—6, J.

Donner, Liverpool, coal dealer—13, T. Marsden, Radford, machine maker—24, R.

Dean et, Glastonbury, Gloucestershire, worsted spinner.

CERTIFICATES to be granted, unless cause be shown to the contrary, on or

before Feb. 12.

H. More, Birmingham, joiner—J. Brockhouse, Derby, watchmaker—J. Wile,

Stafford, ironmonger—J. Brock, Victoria-street, Plimsdon, corn dealer—1, T. Tidwell,

Wimshill, Staffordshire, grocer—T. Horton, West Bromwich, Staffordshire, iron-

founder—S. B. Hoister, Broad street, Chesham, Manchester warehouseman.

PRICES OF MINING SHARES.